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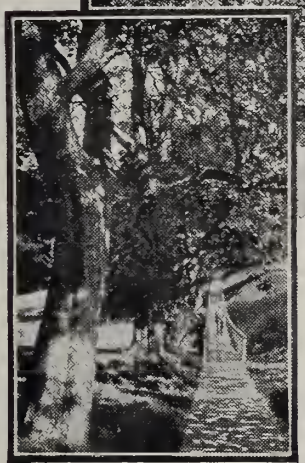
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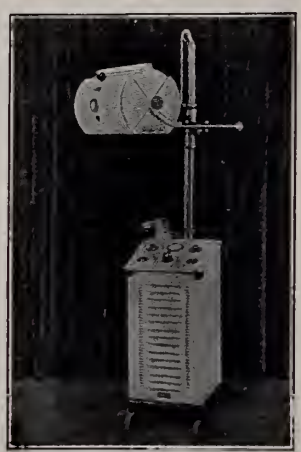
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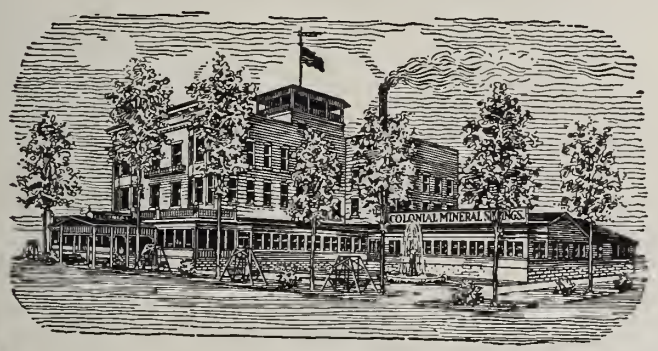
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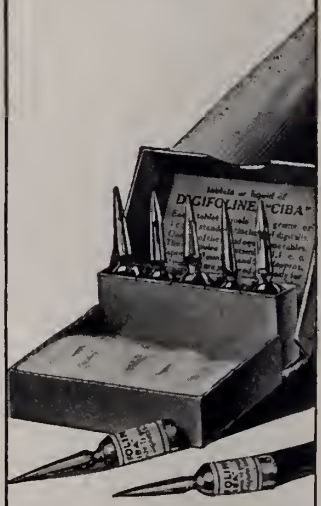
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[1] *J. Biol. Chem., 76:2.* [2] *Ibid., 66:451.*
[3] *Ibid., 80:15.* [4] *Ibid., 76:251.*

WATCH FOR SPECIAL COLOR SUPPLEMENT IN JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION JANUARY 18th, 1930



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PUBLIC HEALTH — SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Urban vs. Rural Health

Is the city or the country the better place in which to live? This same old question which has been puzzling public health workers for years and has kept more than one statistician in a job is still the subject of controversy and the object of investigation.

An interesting discussion on the subject appeared in a recent issue of *The Survey* under the signatures of Dr. Haven Emerson and Professor Earle B. Phelps, both of the Department of Public Health Administration of Columbia University.

The conclusion reached by them is that the death rate still is higher and the expectation of life is less in the city than in the country, but that for the past 50 years the discrepancy between rural and urban death-rates has been rapidly decreasing.

An analysis of the period from 1910 to 1920 is made. During that 10-year period, the death rates from all causes were higher for city populations for each of the years by almost exactly the same degree—18 per cent.

Under conditions as they existed in 1909 and 1911, a male child born and continuing to live in the country, would, on the average, live nearly eight years longer than a male child similarly born and living in the city, it is estimated. However, it is shown that both city and country people gained in probable length of life in the decade 1901 to 1911, and that there probably has been a continued reduction, especially of the urban population since 1910.

The apparent reasons for the advantage of the country dwellers are given in the following extracts from the article:

"Apart from heredity, race, age, sex and possible social selection, there are many elements which may have a share in causing this advantage, such as difference of atmosphere, water, food, clothing, lighting, insects and fellow humans.

"Under our present-day habits of life, especially in cities, we deal largely with an artificial climate. In addition to the temperature, humidity and movement of the air, its three significant physical properties affecting comfort and health, the atmosphere has determined the character and extent of the sun's rays which reach the earth's surface. The open air of the country has advantages over the city, especially in summer. Air movement is lessened by tall buildings and the human output of humidity and heat become distressing in crowded places. In the city the heat of the summer sun striking the masonry, building and paved streets, is either reflected, adding to the immediate discomfort, or absorbed and stored, to be returned during the nightime; in the country, this heat is largely absorbed and neutralized by green foliage.

"Strong evidence has been presented to suggest that young city children suffer more than country children from diarrhea and enteritis because the surrounding brick, stone, concrete and asphalt make it impossible for them to adjust to temperature and humidity as favorably as people can where there are trees and grass.

"Atmospheric pollution with smoke and dust, and the fog, which is increased by the presence of both of these in the air, reduces the permeability of the air for the short rays of light which prevent and cure rickets. Even with the widespread use of cod liver oil and artificial sunlight to correct and prevent rickets, there was in 1920 a ratio of 1.75 cases per child population in cities to every one among country children in the United States.

"While many elements go to make up the causes of death from bronchitis and pneumonia, it is worth noting that in the regisration area of the United States, the city rates were far above those in the country.

"In the use of artificial light, the dweller in towns submits to conditions to which the human eye is not fully adapted at work and in his pleasures, which the rural resident does not have to suffer.

"From the experience of this country, it would appear that the acute communicable diseases of childhood are acquired earlier in life in cities, that they cause a higher death rate for this reason among children and that adult city populations are more generally immune to measles, mumps, diphtheria and scarlet fever than are country people of the same ages.

"In spite of our inadequate reporting of the venereal diseases and the uncertainty as to certification of deaths from these causes, all the experience with both white and colored populations in this country tends to show their much wider prevalent and higher mortality in cities than in rural regions. Some of the difference may be due to the greater proportion of persons of the earlier decades of life in the cities.

"The marked and consistently higher death rates from diabetes and appendicitis in cities are in all probability related to the manner of life, with too much food and the decreasing necessity for bodily exertion in the ordinary conduct of life as the major causes?

"With the exception of those mental diseases which follow alcoholism and syphilitic infection, which are generally more frequent in the city than in the country, there is no evidence in the admissions to state mental disease hospitals that the city offers a worse environment than the country. In fact, quite the reverse conclusion can be drawn from the reports of several of our states."

Some of the advantages enjoyed by the city dwellers over their rural neighbors were listed by the authors as follows:

Prevalence of coughs and colds among school children is less in cities than in the country districts as the inclemencies of weather are much less a hazard because of the nearness of the child to school, the freedom of the pavements from snow, slush and water, and the quicker drying of hard, drained street pavements.

Typhoid and dysentery rates show a marked advantage to the urban dweller because the economy of handling water supplies for large populations makes possible a system of safeguards which is prohibitorily expensive for the small town or the single farmhouse.

The city dweller may supply his nutritional needs more reliably throughout the seasons and often at less expense than can the rural resident, the power of demand by cities and the greater buying power permitting a degree of supervision over the sanitary safety and variety of foods which is quite impossible in scattered rural districts. The city dweller also has an advantage in regard to safer milk supplies.

Cities are favored beyond the rural districts in freedom from disease-bearing insects, such as the fly and mosquito. The urban malaria death rate in 1920 in the U. S. was 0.9 per 100,000 population and the rural 5.9.

In concluding their survey, the authors declare:

"Whether we shall ourselves be so modified or adapted that we can tolerate or survive, on equal terms with our country cousins, the conditions now inherent in city environment, or whether we shall so alter and command the contacts and physical setting of our urban life that these no longer constitute a handicap, only the future can tell."

Multiplicity of Medical Legislation

A survey of federal and state legislation made recently by the Bureau of Legal Medicine and Legislation of the American Medical Association reveals that since January 1, 1929, bills numbering approximately 2500, which in one way or another were of interest to the medical profession, directly or indirectly, were considered by the legislatures of 43 states and the U. S. Congress.

Measures of all kinds relating to the practice of medicine, the regulation of cults and limited practitioners, the revision of rules pertaining to qualifications of limited and regular practitioners and public health generally, were considered.

The introduction of this amazingly large crop of legislative proposals affecting medical practice and public health administration illustrates the rapid growth of public interest in the field of medicine and public health.

Also, analysis of the data collected serves as a reminder of the necessity for the continuance and further development of strong organized medicine. Only through the maintenance of a closely-knit, alert organization, with strong and active committees in close touch with the legislative hub of every state, and with an alert and responsive membership, can the medical profession hope to protect its own interests, and of greater importance, the health and welfare of the people, by arousing public sentiment against proposals considered detrimental to the best interests of the public generally; and in favor of constructive legislation.

Although the Eighty-Ninth General Assembly of Ohio does not convene until January, 1931, medical organization in Ohio must constantly focus its eyes on that future date when it will again, no doubt, be called upon to raise its voice against the selfish, fallacious and dangerous propositions of persons and groups who seek to tear down the high standards of medical practice in this state or foist onto the unsuspecting public legislation of a harmful type.

New and complicated legislative, administrative, social and economic questions are always before organized medicine. The job of analyzing them and solving them in the most beneficial manner for all concerned is ever present. The illusion which some have that the present existing situation is the final and finished thing; that nothing can take place to disrupt the present state of affairs or overthrow the good work which has been accomplished previously, must be abolished, for as one philosopher once said: "There is no illusion so hard to all as the illusion of finality".

A new calendar year has arrived. Members of the State Association must look to the future at the same time they study and seek solutions for the many current problems. Preparedness should be the watchword, for the best defense in the last analysis is a good offense.

Obstructive Anti-Vaccinationists

On the day recently that the State Department of Health issued a statement deploring the increase in smallpox throughout the state and declaring that "the need of vaccination campaigns is evident, especially in rural communities", the daily press carried an article telling of the trouble school officials of a Southern Ohio township are having with parents who have refused to permit their children to be vaccinated.

What the attitude of the school officials in this particular vicinity should be is well summarized in the following editorial in a leading Ohio daily:

"Where people live in communities there are limits to personal liberty", the writer points out, "One may not believe in sewers, but one must connect his house with the sewer system for the sake of the general health. He may not believe in the germ theory of disease, but he is required to quarantine himself for the general good if he

catches a contagious disease. Nor can a man's belief against vaccination stand where the public welfare is concerned. He may or may not give his children what medical treatment pleases him only so long as his medical beliefs or practices do not endanger other men's children.

A glance at the morbidity and mortality rates of smallpox for the past year raises the question in some communities of the state as to whether public officials are using all of the authority given to them to prevent the spread of this disease.

Scientific study and reliable statistics have shown beyond all doubt that there is no sound argument against vaccination as the successful measure of prevention against smallpox. It is time that antagonism to this life-saving method be eradicated, especially when such opposition is a menace to the lives of many innocent boys and girls.

The course which should be followed by all Ohio school officials and public health officers is clearly charted—vaccination should be resorted to where communities are menaced by smallpox and the law requiring vaccination as a pre-requisite to school attendance should be vigorously enforced.

Confidential Communications

Some pointed comments relating to the obligation of secrecy of confidential communications were made recently in the *New York Herald-Tribune* by Dr. S. Parkes Cadman, prominent and internationally known church leader, in answer to a question written to him by a reader of his question and answer column.

"Confidence intrusted to a clergyman by those who seek his spiritual direction should be held by him as inviolable and sacred", writes Dr. Cadman. "The exposure, detection and punishment of crime is the business of the law and the courts. These respect the clerical position as I have stated it, and do not insist that pastors shall reveal secrets committed to them in the confessional."

"Many clergymen would undoubtedly advise the wrongdoer to surrender himself or herself to the authorities, while others might not so advise. Much depends upon the rules of various churches and the nature of the offense confessed.

"Of course, if an innocent person were likely to suffer for the crime, any clergyman, as I understand it, is bound to prevent such a miscarriage of justice."

Dr. Cadman has analyzed accurately a principle and law which also applies to physicins.

Naturally, physicians do not permit an innocent person to suffer nor permit a miscarriage of justice if knowledge which he had obtained in a professional way would prevent these things happening.

However, any effort to force a physician or a clergyman to testify and reveal facts which had been obtained or told to them in confidence by patient or parishioner would be unwise, would lead to abuses and eliminate that close and necessary confidence which exists between the professional man and his clientele,

---

Cooperation in Public Health

The tenth Annual Conference of Ohio Health Commissioners held recently in Columbus, and the spirit and comments by those in attendance, further emphasize the gradual and hopeful increase in mutual understanding between many of those engaged in public health administration and the medical profession, and the encouraging cooperation which has been established in many of the communities in Ohio.

Perhaps the keynote of the meeting was expressed by Dr. Edward King, Director of Public Health for the State of Indiana, when he pointed out that the great majority of practicing physicians are intensely humanitarian and that their interest in the promotion of public health through the proper channels has made possible to a large extent the safeguards that have been secured through legislative enactment and otherwise.

In enumerating fundamentals in public health purposes and activities, he emphasized especially the necessity of still fuller cooperation of public health workers with practicing physicians. On this point, he said: "The highest ideals, the highest accomplishments will never be reached by public health workers until such cooperation is secured and made effective".

Other fundamentals in health work which he enumerated were:

To further reduce the death rate resulting from communicable diseases.

The prevention, through education and law enforcement, of venereal diseases.

An enlargement and extension of work in prenatal, maternity, infant and pre-school cases by local health departments.

Extension of medical inspection and health education in the public schools.

HAVE YOU provided for your "Continuous Membership" by paying your 1930 dues before January 1? If your 1930 Membership Dues in the State Association for the Calendar Year of 1930 have not yet been paid, will you kindly get in touch with the Secretary-Treasurer of your County Society now?

Concerted efforts to establish the uniform custom of regular health examinations of persons by their family physicians.

Discussions at the conference illustrated the results which can be and have been secured in some localities in the application of sound and practical preventive medicine. There were quite general expressions on the effectiveness of the cooperation of official health agencies with the practicing medical profession in the reduction of communicable diseases, and the cooperation of the physicians with the health department in the prompt reporting and quarantine enforcement in such cases.

A constructive report on methods of health teaching in the public schools was submitted to the conference by a committee of health commissioners representing the Ohio Society of Sanitarians. It was pointed out that such health teaching should be obvious and practical, not theoretical; that methods of health education should receive the consideration and endorsement of health commissioners and physicians prior to the inauguration of new and extensive programs; corrective gymnastics and diagnosis should be under the direct supervision of physicians; all who "major" in school health training should have a scientific background of physics, chemistry, biology and social sciences. The report clearly and properly pointed out the necessity of instructing teachers in the value of cooperation with local health departments and the local medical profession in school health work.

Sentiment among those in attendance at the conference indicated an encouraging desire, through experience, that public health work should be based on sound scientific, economic and social principles.

In commenting on this situation under the title, "The Pendulum Swings", the Bulletin of the Columbus Academy of Medicine observes that "it was a satisfying thing" to hear speakers make such declarations as: "Our health programs should have the approval of the medical profession before they are launched" and "We have made mistakes in the past in not securing such approval"; and from another speaker: "Cooperation with the medical profession is necessary"; and from still another: "The medical profession in its practice and service to its patients does the things that are fundamental for all successful health work".

The *Bulletin* in commenting further on the subject, said:

"It is safe to say that the best guarantee any community can have against disease is a well-educated and wide-awake medical profession.

"Diseases of known etiology can be controlled by a well trained and cooperative profession. Quackery of all kinds is an expensive fad and becomes unbearable and intolerable.

"It is indeed a pleasure to hear leaders in health work give emphatic utterances to the fundamental nature of the work of the medical profession. Too much attention has been given to the 'form' and too little to 'substance'."

With the rapid progress in preventive medicine, sanitation and public education, certain readjustments have been necessary in the broadening of the field of public health. It is to the credit of many health workers, both official and voluntary, who have realized that proper health activities are founded on scientific medicine and on good medical practice, and that the group thought of the medical profession should be relied upon as a vital factor in determining the further development, extent, proper limitation, and course of public health activities.

Constructive, cooperative public health work need not include such agencies and individuals as have failed to gain the confidence and cooperation of the medical profession and which sometimes promote appealing slogans, vague programs of activity, promiscuous clinics and which may create misunderstanding, even misinformation, perhaps develop lack of public confidence in the local profession, which increase self-diagnosis and self-prescribing, and which encourage persons amply able to pay for medical service to expect free service.

Function of Government in Research

The functions of government, how often and over how wide a territory they shall be extended, present a much-discussed and very debatable problem.

Dr. Harrison E. Howe in *Industrial and Engineering Chemistry* briefly defines the function of government in regard to research in these words:

"A problem must either be so broad as to affect a very substantial portion of the population or *so fundamental that it cannot properly be attacked by other agencies*, to bring it within the proper purview of the directors of research under federal appropriations. A possible exception is where industry, unacquainted with the methods of research, requires leadership to be taken by a federal group, but this should be relinquished with all speed when the industry is capable of caring for itself."

Dr. Howe's conservative and comprehensive view on the relationship of governmental functions to research perhaps is equally applicable to other lines of endeavor. The danger, however, in permitting federal agencies to assume supervision over anything which is not strictly within their proper jurisdiction, lies in the fact that federal supervision, once it has taken hold, is difficult to abolish; for bureaus and departments maintained at public expense are largely devoted to propaganda for continuous and increased appropriations.

The Treatment of Tuberculous Empyema

WILLIAM L. KELLER, M.D., Washington, D. C.

STRICTLY speaking, tuberculous empyema is a form of suppurative pleuritis in which the tubercle bacillus is the only etiological factor, but often invasion by other organisms results in a mixed infection. The treatment of this form of empyema depends upon the type of case: First, whether the cavity is open or closed; second, whether the exudate is serous, tuberculous purulent (sterile), purulent from mixed infection, or hemorrhagic; third, whether the lung expands or remains collapsed upon withdrawal of the fluid; fourth, whether the fluid persistently reappears after each aspiration; and fifth, whether it is complicated by bronchial fistulas.

Treatment of serous or purulent tuberculous empyema in the early stages is essentially the same, that is, only sufficient fluid is removed by aspiration to relieve respiratory and circulatory embarrassment, and regardless of whether the exudate is serous, purulent or hemorrhagic, aspiration is always indicated when the fluid is sufficient in quantity to produce symptoms of respiratory or circulatory distress. (Fig. 1). In any case the fluid is never removed in such quantities as to allow the tuberculized lung to expand. If there is any danger of expansion incident to removal of too much fluid compressing a tuberculous lung, the fluid should be replaced by nitrogen gas or filtered air.

Since the use of nitrogen to collapse the lung in the treatment of unilateral pulmonary tuberculosis has become a recognized procedure, the number of large cavities occupying almost the entire chest on the side involved has become materially increased. (Fig. 2A). The fluid content is more often purulent from mixed infection due to the contamination resulting from repeated aspirations or metastatic infection. In cases of this type admitted to Walter Reed General Hospital, sixty percent had been aspirated at intervals for more than one year and forty percent for over two years. In those cases which have been repeatedly aspirated or who have had nitrogen replacement the problem is different, even if the fluid remains serous or purulent (sterile). The treatment becomes irksome and when they see that their general condition is not improving these patients often demand radical surgery. An extrapleural thoracoplasty is the procedure of choice in such cases, and, after the usual preoperative survey, an effort is made to remove all the fluid from the cavity by aspiration the day before operation. At operation, obliteration is accomplished in one or more stages, depending upon the position and size of the cavity. (Fig. 2B). Paravertebral anesthesia, with local infiltration and gas oxygen, is the anesthetic used. Our usual procedure has been either the removal of sections from the eleventh to the fifth ribs inclusive, in the first stage and the upper ribs at a later operation, or to remove from the first to the eleventh at one time. This form of partial collapse plus a phrenicotomy will obliterate a certain percentage of these large cavities, but many will still hold six hundred or more cubic centimeters of fluid (Fig. 2C) and where the sternal ends of the ribs are rigid, resection of sections of the ribs anteriorly will eventually be required.

Over seventy per cent of our tuberculous empyema cases had had an open thoracotomy before admission. The greatest tragedy that can befall the tuberculous empyema patient with sterile exudate is to subject him to an open thoracotomy operation which always means a mixed infection. This results in much unnecessary radical surgery that these patients already handicapped by tuberculosis of one or both lungs should not be compelled to undergo.

Closed empyema with mixed infection should be treated by the closed method if possible. When the infection is of long duration and when there is no tubercular lesion on the pleural aspect of the lung. Dakin's solution is often well tolerated, but it should not be used when the pleura is thin and there are lesions near the pleural surface. In the latter type, sterilization can often be accomplished by the negative pressure method substituting twenty per cent argyrol solution for the Dakin's (Fig. 3). If the closed method fails, the cavity can be sterilized and obliterated by the many stage open method that is used in cases of of non-tuberculous chronic empyema. The decorticating influence accredited to Dakin's solution has not been confirmed in our service, and this opinion is based upon direct observation of the open cavities of as many as fifty cases at one time, including both the tuberculous case complicated by mixed infection and the ordinary post-pneumonic and post-influenzal types observed over a period of weeks or months.

Cases of tuberculous empyema of long duration and complicated by small bronchial fistulas should first be treated by the closed method, with argyrol irrigations at two hour intervals during the day and every three hours throughout the night for seven days. Following this, irrigations of one to one thousand solution of gentian violet is used for three days, and finally, before the tube is removed the cavity is irrigated with a one to five hundred solution of gentian violet in such a manner as to reach every part of the

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From the Surgical Service, Walter Reed General Hospital.

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Fig. 1—Large cavity filled with filtered air after removal of fluids.

cavity. If these agents fail as they frequently will in patients with multiple fistulas, the open method is used as in cases of the large bronchial fistula until the cavity is sterile and the fistula is closed by muscle implant, when the cavity is obliterated by thoracoplasty.

Large bronchial fistulas following ruptured tuberculous cavities should be freely exposed immediately and treated by any method that will constantly remove the secretion from the fistula and keep the parts dry. Finally the lung is collapsed by thoracoplasty after closure of the bronchial fistula.

The treatment of a chronic tuberculous empyema complicated by mixed infection incident to an open thoracotomy is practically the same as that used in the ordinary post-pneumonic and post-influenza type of chronic empyema; that is, the many stage open operation with dakinization of the cavity until sterile and closure after seven consecutive negative cultures have been obtained. The tuberculous case, however, differs in certain respects. In the chronic non-tuberculous open empyema our aim is to obliterate the cavity by methods that will produce a maximum expansion with a minimum mutilation and a consequent increase in vital capacity, the amount of rib resection always depending upon the power of the lung to expand. On the other hand, in tuberculous empyema we never decorticate, as no expansion is desired. These tuberculous cases are also kept open longer for heliotherapy and the obliteration of cavities by thoracoplasty; also muscle implants are used more freely. These cases are never good surgical risks and they are more susceptible to surgical trauma. The open tuberculous empyema cases with the thickened pleura of mixed infection, tolerate Dakins without irritation.

The mortality in chronic and supra-chronic non-tuberculous empyema has steadily decreased with improved technique until it is now less than nine per cent, while in tuberculous empyema it has steadily increased to 18.8 per cent as we are taking greater chances with these derelicts than in the past. A large percentage of the chronic tuberculous open empyema patients are profoundly septic, and depressed mentally and physically. Many of them suffer from heart and kidney complications and have already had radical operations without relief. Our experience with nearly four hundred of the supra-chronic non-tuberculous empyema cases convinces us that the open, many-stage type of operation is the only procedure that will enable us to cope with such complications as bronchial fistula, osteomyelitis, retained foreign bodies, and to reduce the high mortality incident to the old operations.

The proper preoperative survey and treatment of these cases is absolutely imperative and it should include cultures from the cavity to determine the organisms present, examination of blood, including Wassermann and blood chemistry, examination of the urine, sputum, repeated estimations of the vital capacity and blood pressure, *X*-ray, and a general medical examination. A high caloric diet is important and preoperative blood transfusion is done in cases that are markedly anemic from sepsis and are much emaciated. The cavity is kept empty by irrigation. Just before operation, patients requiring it are digitalized, their blood, sugar and alkali reserve built up by the administration of grape juice, whose tartaric acid is neutralized by the addition of sodium bicarbonate in excess to ensure alkalinzation. No starvation or dehydration by cathartics is permitted. The patient's blood is typed and is checked with that of the prospective donor, who is held in readiness in an adjoining room before the start of the operation. A compound enema is given on the morning of the operation. Morphine sulphate and atropine sulphate, .016 gram (¼ grain) and .0004 gram (1/150 grain) respectively, are administered on the ward, one and one-half hours before operation is scheduled and the morphine is repeated, .01 gram (1/6 grain) being given thirty minutes before the operation begins. The anesthetic of choice is a combined anesthesia of novocaine as a vertebral block associated with superficial and deep infiltration of one-half per cent solution throughout the field of operation plus nitrous oxide and oxygen under positive pressure. No ether is ever used in chest cases at the Walter Reed General Hospital.

Owing to the fact that a large percentage of these cases have already had many operations, old healed incisions are extended to include the

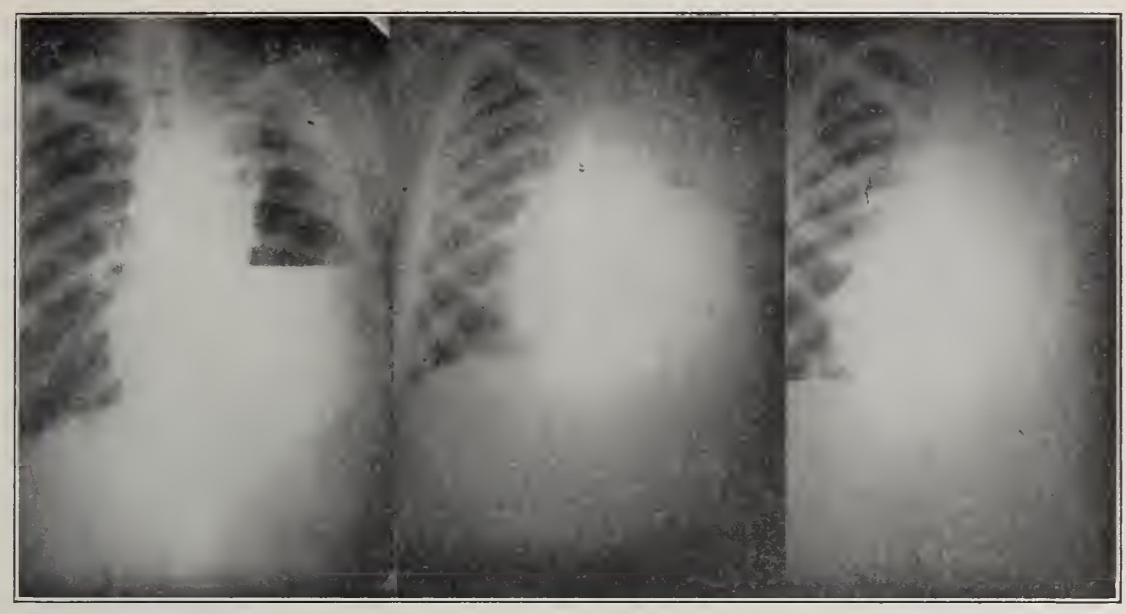


Fig. 2—(A) Large cavity extending almost to sternal margin.
(B) Cavity still holds 600 c.c. of fluid after posterior resection of eleven upper ribs and phrenicotomy.
(C) Obliteration completed by resection of sternal ends of five upper ribs.

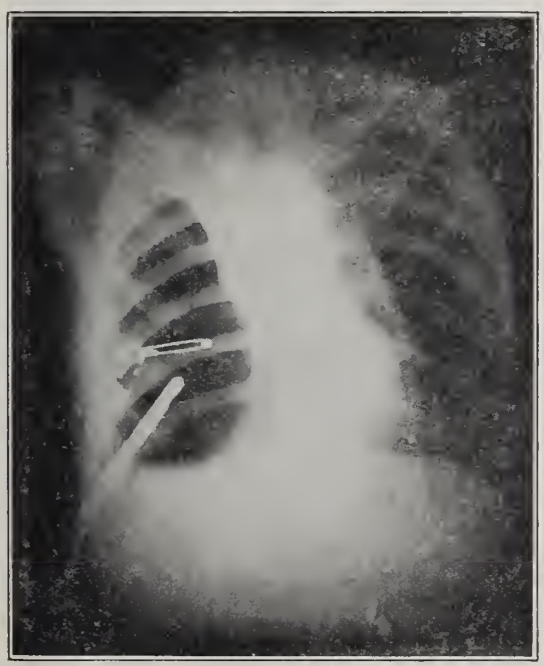


Fig. 3—Closed tuberculous empyema with mixed infection.

portion of the cavity to be exposed (Fig. 4), and every effort made to ensure complete hemostasis. Trauma due to rough sponging or careless retracting is religiously avoided. Ribs are separated subperiosteally from surrounding tissues, but the periosteum is never detached from the rib at the point of division. Sequestration in the presence of suppuration is not uncommon if the above precaution of dividing the periosteum flush with the rib is omitted, as pointed out in a previous paper. (1) Blood pressure readings and pulse rate determinations are made at five to ten minute intervals, depending upon the condition of the patient, and reported to the surgeon together with the elapsed operating time. Normal saline solution is started when the systolic pressure drops below 100 and the operation is suspended if the systolic pressure drops to 90. If it should drop as low as 80, blood transfusion is done. This rule does not apply to those extreme cases of prolonged thoracic sepsis where the systolic pressure is not above 90 systolic at the beginning in spite of preoperative transfusion and other supportive treatment.

The bony structures over the part of the cavity to be exposed are resected and the parietal pleura excised. All scar tissue and skin is conserved and sutured over the cut muscles and rib stumps to the pleural margins. If the skin is not sutured to the pleural margin, the muscles and rib stumps would be left exposed with resulting atrophy and retraction, making plastic closure more difficult and post operative dressing painful. The dressings are painless when the skin is brought down to the pleural margin because when this is done nothing but the insensitive pleura and skin come in contact with the dressings. (Fig. 5).

When the patient is ready to withstand further operative procedure he is again prepared and more contiguous structures overlying the cavity are removed and this procedure is continued until the cavity is laid open in its entirety. If the cavity is of the massive type and extending to the diaphragm a phrenicotomy is done under local anesthesia in an interval between operations to help reduce the size of the cavity.

PLATE 1

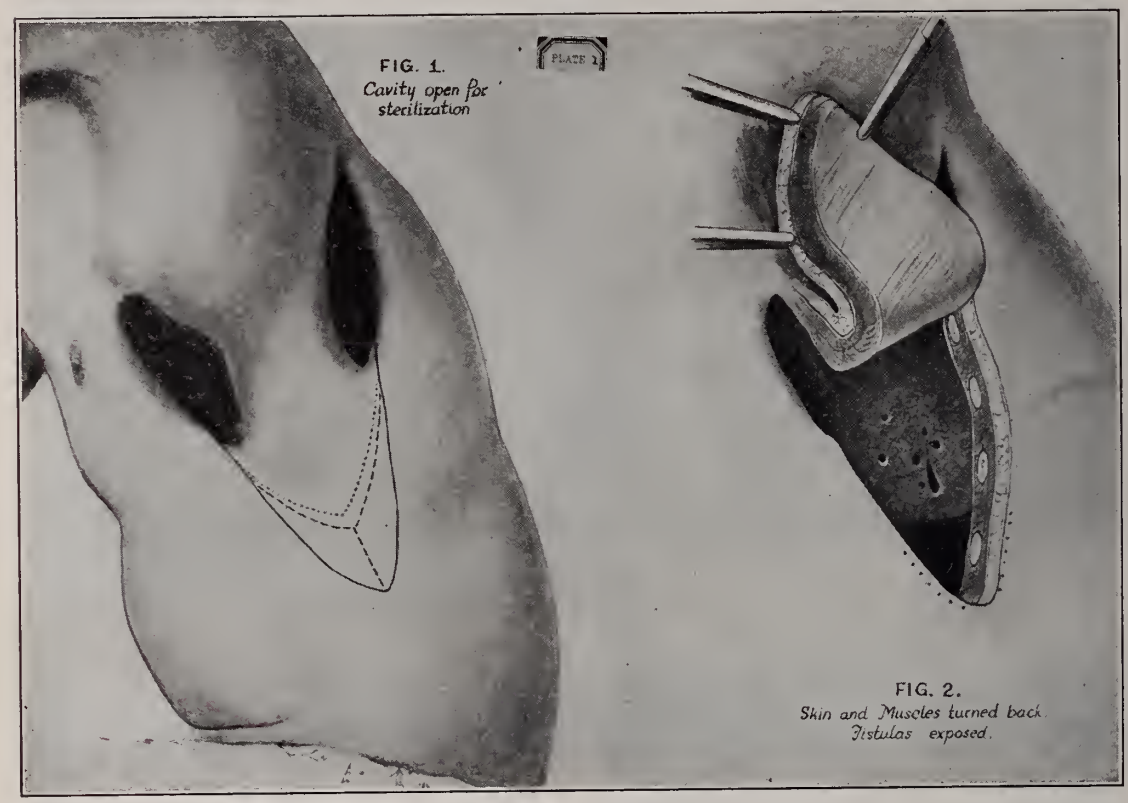


PLATE 2

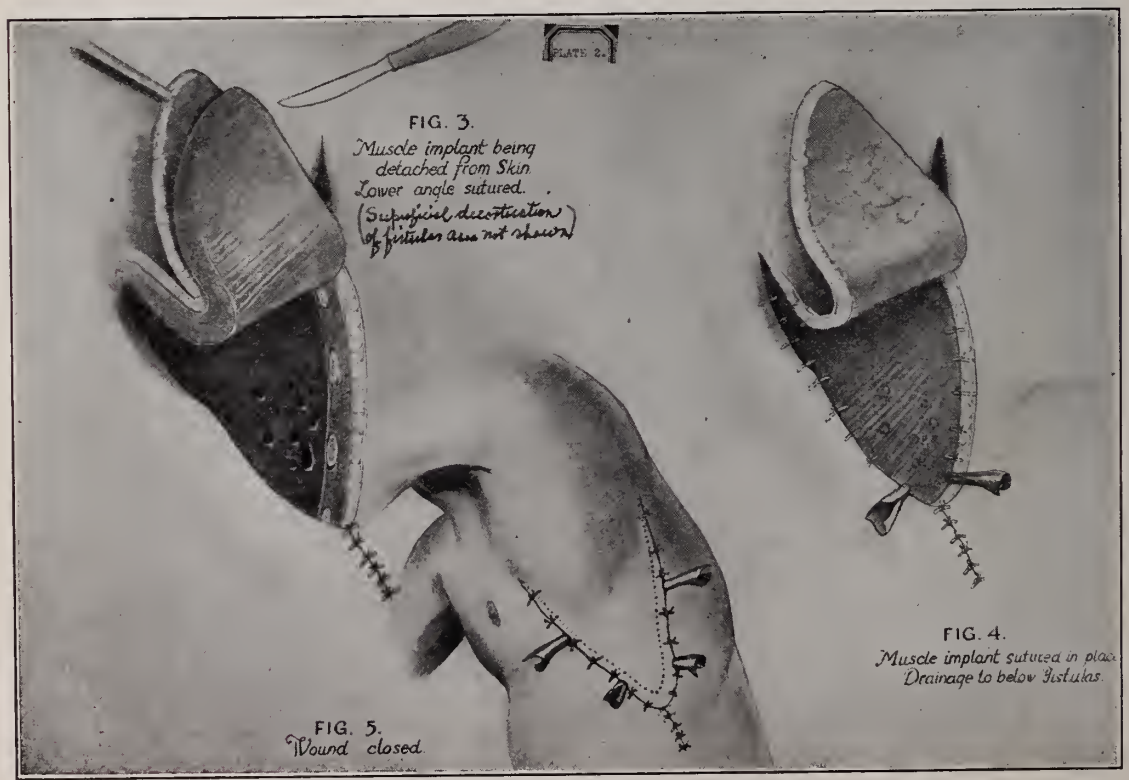




Fig. 4—Condition on admission. Old incision utilized even when improperly placed.



Fig. 5—Rib ends and muscles covered by suture of skin close to pleural margin.

Before considering plastic closure, the closure of bronchial fistulas deserves consideration, as no cavity with a patent bronchial fistula should be closed. In our chronic non-tuberculous empyema cases, forty per cent of the bronchial fistulas closed spontaneously when the wound was laid open and many of the remaining sixty per cent closed after cauterization, or as a result of application of three per cent alcoholic solution of gentian violet. In bronchial fistula of the tuberculous empyema, conditions are different and the percentage requiring closure by such measures is much greater. Of sixty-nine cases included in the present series, twenty-four per cent had bronchial fistulas that required treatment. Our greatest problem is the closure of many of the bronchial fistulas of large calibre. Mobilization of a part of a lobe or isolation of a bronchus with view to obliteration by suture, may result in lung or brain abscess or relighting a quiescent tuberculous process and unnecessary surgical trauma. In many of our early cases the muscle implant was detached from its pedicle in two weeks, but as an extra operation for closing was then necessary after the pedicle had been detached, that method was abandoned and an implant with an attached pedicle was used in all such cases. (Plates 1 and 2). In one case where this procedure was used the patient fell down stairs and in an effort to check his descent he clutched the banister and in doing so he pulled the muscle implant loose from the lung. We have changed the technique by implanting the muscle on a surface that has been superficially decorticated for its reception while the arm is held in the extreme vertical position and have had no further trouble either in the fistula or the open tubercular cases where this type of muscle implant is often used to obliterate cavities even when no fistulas exist. Free arm motion without tension on muscle implant is shown in Fig. 6, A, B, and C.

All elements concerned with chronicity being eliminated and seven consecutive negative cultures reported from the laboratory, the patient is ready for the final closure. The skin is freed from the underlying structure and undermined to the extent required. The muscles which were saved at the previous operations, are freed sufficiently to allow of suture over the remains of the cavity. The skin edges and underlying muscles are approximated by figure-of-eight silk-worm sutures. Numerous rubber dam drains are used to facilitate drainage. All wounds are strapped with adhesive plaster to aid in obliteration of cavities and to permit removal of sutures by the third or fourth day. This last is important, as skin sutures are not well tolerated by the tissue of tuberculous patients who have mixed infections of long duration.

At one period there were chronic empyema cases at Walter Reed General Hospital from twenty-nine different states. Many hopeless cases are sent here from distant states by well



Fig. 6—(A) Chronic open tuberculous empyema with multiple fistulas.
(B) Showing free arm motion without tension on muscle implant.
(C) Posterior view.

meaning patients, who themselves have had operations for empyema at the hospital and who do not realize the great difference that may exist in cases. It is very difficult to convince such hopeless cases that they are beyond surgical relief, and still harder to turn them down when they have come from the Pacific Coast or Middle West and no patients except those who are in a dying condition, are refused surgical aid. None of these cases have died on the table, but some died within a week and some in a month or two after operation. They usually died from suffocation incident to inadequate pulmonary ventilation, diminished breathing space due to advance of the tuberculosis in the other lung, or breaking up of the respiratory balance by pressure on the opposite lung exerted through the mediastinum as the result of thoracoplasty on the affected side. This was particularly true in those patients who were existing only on a little more than tidal air.

The operative work on these tuberculous patients must be done with the knowledge and realization that few will stand more than twenty-five minutes of surgery in any one stage, and there should be a non-rotating team of assistants. It has been observed that assistants will go to any extreme to help save a patient that goes bad on the table, but it is often too late, as these patients have no "comeback" and when working close to the dead line on cases of prolonged thoracic sepsis with one lung already gone, the other involved and the condition complicated by myocardial and kidney changes, shock must be anticipated and prevented. Willing and frenzied efforts on the part of the surgeon or his assistants will not save life in such patients if they are permitted to go into shock. Prevention of shock by proper preoperative preparation, elimination of open thoracotomy in uncomplicated tuberculous empyema, limitation of surgery at each stage to less than the patient can stand, elimination of surgical trauma during operation and rigid post operative care are the surest measures to lower mortality.

(1) The Treatment of Chronic Empyema Where the Recognized Surgical Procedures Have Failed to Produce Obliteration, Keller, William L., M.D., Ann. Surg., November and December, 1922.

NEW BOOKS

Interns Handbook. A Guide to Rational Drug Therapy, Clinical Procedures and Diets. By members of the faculty of the College of Medicine, Syracuse University, under the direction of M. S. Dooley, A.B., M.D., chairman Publication Committee. J. B. Lippincott Company, Philadelphia and London.

Tularemia. History, Pathology, Diagnosis and Treatment. By Walter M. Simpson, M.S., M.D., F.A.C.P., Director of the Diagnostic Laboratories, Miami Valley Hospital, Dayton, Ohio; formerly Senior Instructor in Pathology, University of Michigan. Foreword by Edward Francis, Surgeon, United States Public Health Service. With 53 text illustrations and 2 colored plates. Paul B. Hoeber, Inc., Publisher, New York.

Recurrent Hyperthyroidism as a Result of Gall Bladder Disease

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THE role which focal infection plays in the production of hyperthyroidism has long been recognized and is frequently mentioned in the literature. Our colleagues, the tonsil surgeons, have long incriminated diseased tonsils as one of the causative factors in thyrotoxicosis. H. T. Bailey[1] cites a case in which, after repeated attacks of severe tonsillitis, hyperthyroidism developed, only to subside after tonsillectomy. The hyperthyroidism recurred at a later date, as a result of an infected tonsillar remnant. All symptoms of hyperthyroidism disappeared promptly after removal of the tonsil stump. S. P. Beebe[2], after examining 3500 cases of thyrotoxicosis, reports 35% to 40% of all cases to have a history of repeated attacks of tonsillitis. Abram[8], reviewing a series of 9864 cases, feels that tonsillar infection plays a contributing part in the production of exophthalmic goiter. I am sure that all present have seen similar cases of hyperthyroidism which have disappeared after tonsillectomy. To be sure, a certain number of these cases, it might well be argued, had burned out, or in other words, hyperthyroidism being self-limited in certain cases, might have run its course coincidently with the removal of the infected tonsils. That teeth may well be a causative factor in the production of hyperthyroidism has been reported but once in literature. Sinuses are usually placed in the same group as teeth and tonsils in looking for focal infection. To date, however, there are no cases on record to prove this point.

The gall bladder, when infected, is catalogued with the above as being one of the many possible foci of infection. Once again there is a paucity in the literature relative to the part which this infected organ may play in the production or maintenance of hyperactivity in the thyroid gland. Beck[4] concludes in the following statement: "Oral sepsis and inflammatory diseases of the gall bladder and appendix play an important role in the relation of chronic focal disease and hyperthyroidism, comprising 63% of 205 infections present in a series of cases." Drs. Ochsner and Thompson[2] noted fatty changes occurring in the parathyroid glands in cases of infected gall bladders. The thyroids themselves were, in their group, apparently not influenced by the infection in the biliary tract. In all the larger thyroid clinics, after hyperthyroidism has been diagnosed, a careful search is made for focal infection. These foci are eradicated usually after thyroidectomy, but in a few cases before the operation on the thyroid is done, care being given especially to the eradication of infected teeth and tonsils. I do not believe, however, that the same careful investigation is made in regard to possible biliary infection.

That infections are not only coincidental findings in hyperthyroid individuals, was borne out by that excellent research of Drs. Cole and Womack[6]. These two men, working with animals, were able to produce in the thyroid, after certain cases of infection, changes which, under the microscope, were typical of those of exophthalmic goiter. Langstroth[9] believes that the biliary tract may be considered as a possible focus of infection in creation of hyperthyroidism. He thinks that teeth, tonsils, the appendix, the cervix in the female and the prostate in the male, are more common areas of focal infection, tending to produce hyperthyroidism, than is infection in the gall bladder. In a series of thyroids removed at autopsy by Gray[7] of St. Louis, a large percentage showed abnormal thyroids and these abnormal thyroids were usually encountered in patients succumbing to infection.

The literature fails to reveal statistics regarding the incidence of gall bladder disease and hyperthyroidism, although judging from the number of individuals in goiter clinics in which the patient, during the stay in the hospital for thyroidectomy, is suddenly stricken with either gall stone colic or acute cholecystitis, one feels that the incidence may be quite high. The following are examples of this occurrence:

Case 1. Mrs. A. B., Age 63. White. Housewife. Admitted September 1st, 1927, and discharged October 25th, 1927. The patient had a history of tumor in the neck for 45 years with loss in weight, constipation, tachycardia, extreme nervousness, profuse sweating, palpitation of the heart, edema of the ankles, tremor of the hands, metabolism plus 44, electrocardiograph revealing auricular fibrillation. The patient was admitted to the hospital and prepared for thyroidectomy. The operation was successful, but on the seventh day postoperatively the patient experienced intense pain in the abdomen, referred to her back, so severe as to necessitate the giving of large amounts of morphine. Her temperature was 103 and her pulse was 140. The auricular fibrillation which had been controlled, recurred. The patient had a slight amount of icterus in the sclera, was very tender over the gall bladder area and there was a questionable mass palpable. The patient was operated upon 19 days after thyroidectomy under local anesthesia and a gall bladder five times normal size, with a stone in the common duct, was found and removed. At the present time the patient is free from any of her previous symptoms. Her pulse is 80 and she has gained twenty pounds in weight.

Case 2. Major H. B. Age 50. White. The patient complained of numerous attacks of pain

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in the right upper quadrant, never radiating to the back, associated with much gas on the stomach, with marked distention. He had many such attacks. The last attack began five days previously. Stools had been clay colored since, and the patient was slightly jaundiced. He had palpitation of the heart with this attack, but no edema of the ankles. He had lethargy and there was ptosis of the lids with external strabismus. He was seen by Dr. Salzman of Toledo, who made a diagnosis of biliary disease with toxic encephalitis. *X*-ray of the gall bladder was positive for gall bladder disease, as no shadow was found. The patient had a cholecystostomy, the tube staying in place for ten days. The patient's temperature and pulse dropped to normal within six days after operation, but on the sixteenth day his pulse gradually increased so that it averaged in the neighborhood of 120. The patient, instead of being lethargic, now was highly nervous, excitable, and had a marked tremor of the hands, complained of insomnia but was entirely free of any gastric symptoms. The basal metabolism test on two occasions with an interval of four days, was plus 44. He was given Lugol's solution and after his pulse had been down for several days, a subtotal thyroidectomy was done. His convalescence from this point on was uneventful; he was reinstated in the army and was able to do a very heavy duty for a period of about two years. He then had a recrudescence of the symptoms of hyperthyroidism. The patient has not been examined by us, but the reports from the army headquarters would indicate that he has a mild recurrent hyperthyroidism with probable associated disease in the gall bladder, which had not been removed.

There are undoubtedly many cases in which the surgeon was not as fortunate as to have the two conditions manifest themselves at the time, as the two quoted above. Undoubtedly many of these hyperthyroid individuals have latent gall bladders which do not make their presence known until long after the patient has been discharged home, presumably cured. These individuals with infected gall bladders and thyroids which have been operated, are distinctly in the same class as the individual wtih a goiter and badly infected tonsils. One cannot say when the presence of this infection will excite activity in the thyroid remnant. The following are two examples in which the presence of gall bladder disease apparently was responsible for the recurrence of the patient's hyperthyroidism.

Case 1. Mrs. C. F. Age 38. The patient was admitted to the hospital in January, 1926, with all the classical signs of exophthalmic goiter, her pulse rate being 120 and metabolism plus 52. The patient had a history of repeated attacks of tonsillitis in early childhood, with edema of the ankles, and examination of the heart revealed a presystolic murmur and thrill at the apex. She was thought to have a mitral stenosis with superimposed hyperthyroidism. The gastro-intestinal story was productive of no information other than that of chronic constipation. The patient was operated, a subtotal thyroidectomy being done. Her convalescence in the hospital was uneventful until the fourth day after operation, when she had sudden sharp pain in the abdomen with marked tenderness in the right upper quadrant and a palpable mass which was thought to be a large gall bladder. She was discharged home. The patient gained about twenty pounds in weight, her pulse remained at 80 for a period of about five months, when it began to maintain itself in the neighborhood of 100. She was very nervous and tremor was quite marked. Examination of the neck at no time revealed any palpable masses, and there was no reason for believing that the thyroid remnant had enlarged to any great size. The patient was given Lugol's for varying periods during the last year and a half, but her condition was not in keeping with what one usually expects and finds after a subtotal thyroidectomy. The metabolism test on several occasions varied from plus 30 to plus 41. The patient was readmitted to the hospital in October, 1928, and a cholecystectomy was done, removing a chronically infected gall bladder. The liver showed a medium amount of hepatitis. Since this time the patient has gained in weight, has practically no tremor, and her pulse averages 84. The interesting thing about this case was that the patient herself volunteered the fact that within six months after thyroidectomy she had a feeling that her goiter was recurring and since cholecystectomy, remarks that she now feels as she did during the first three or four months after thyroidectomy.

Case 2. Mrs. O. W. The patient was admitted to the hospital in 1927 with a history of exophthalmus, tachycardia, nervousness, tremor, loss in weight, change in disposition and profuse sweating. Her pulse averaged 120 and the metabolism was plus 62. Gastro-intestinal story revealed attacks of severe pain radiating to the right shoulder and back, associated with constipation. There was no history of jaundice. She has had considerable gas on her stomach at times. A thyroidectomy was done and the patient's convalescence was entirely uneventful. After returning home she had attacks of pain in the right upper quadrant, accompanied with nausea and vomiting. Constipation was very severe. She never had any jaundice. The patient was gradually losing ground, had lost weight, her pulse was more rapid, and she was nervous. She did not notice any enlargement in her neck. The metabolism test, taken ten months after thyroidectomy, revealed the rate to be plus 30. She was brought into the hospital, given Lugol's solution again and when her pulse was down, a chronically infected gall bladder with stones was removed. Sinct that time her pulse has been between 70 and 80, she has gained 15 pounds in weight and on examination, we find that she has nothing but a very slight residual exophthalmus and a very slight tremor as a residual of her thyroid activity.

The above few cases are quoted, not as proof positive that hyperthyroidism is due in all cases to infected gall bladders or that all cases of recurrent hyperthyroidism can be attributed to infection in the biliary tract, but merely to suggest the frequency of association between these two distinct conditions. The authors, however, do believe that not sufficient investigation is given to the biliary tract in frank cases of hyperactivity of the thyroid gland. The routine use of cholecystogram might be advocated in the investigation of recurrent hyperthyroidism because the association of these two diseases we believe is fairly common.

There are probably many factors in the production of recurrent hyperthyroidism, such as the leaving of too much gland, the activation of the

adrenals as suggested by Crile and others, and also probably some changes in the vegetative nervous system. However, in ruling out focal infection as a possible factor, the authors suggest that more attention be given to the study of the gall bladder from the standpoint of focal infection. That success will be obtained in certain cases of recurrent hyperthyroidism if infected gall bladders are found and removed, is the thought of this paper. The treatment of the cases in which a gall bladder is found to be infected after thyroidectomy, is the same pre and post operatively as that given when operation on the thyroid gland is done. The patient is given Lugol's in small doses regularly for a short period and usually responds to a fair degree to this medication. Morphine and digifoline are used liberally and a rapid removal of the infected gall bladder is done under a combination of local and light nitrous oxide oxygen anesthesia.

SUMMARY

1. Gall bladder disease and hyperthyroidism are frequently associated and the removal of the thyroid alone is not always curative of thyroid hyperactivity.

2. Cases of recurrent hyperthyroidism should be investigated from the standpoint of an overlooked gall bladder infection or a gall bladder disease which has developed since the thyroid was removed.

3. Removal of the infected gall bladders in certain cases of recurrent hyperthyroidism is curative for thyroid imbalance as well as for the biliary infection.

4. Care of the case of recurrent hyperthyroidism in which an infected gall bladder has been found, should be carried out along the lines employed in the care of thyroidectomy.

421 MICHIGAN ST.

DISCUSSION

HARRY G. SLOAN, M.D., Cleveland: The part that chronic infection plays in the activation of exophthalmic goiter is being more widely recognized. In order of frequency the tonsils hold first place as offenders, then infected teeth, sinuses, tuberculous chests, and gall bladders to which Dr. Douglass has called our attention. Rarely is the pelvis found to be a factor. In the vast majority of instances we find the mouth and nasopharynx to be the location—why infection in this area is so frequently associated with exophthalmic goiter we are not prepared to say. We are convinced, however, that it plays a most important role in the causation of the disease.

Clinical observation is our only method of confirming our impressions in this problem. All of us know instances of increase in the severity of Graves' disease during an acute tonsillitis or root abscess of a tooth. The abnormal increase in pulse rate, fever, and metabolic rate are well recognized. When an acute infection occurs during the process of iodizing a gland one notes its softening and increase in size from the firmness so characteristic in the completely iodized thyroid. The vascularity increases as a result of infection, as one can see at operation during an exacebration from this cause.

Thyroidectomy is technically simpler from the viewpoint of hemostasis if the focus of infection has been previously eradicated, and thereby hangs the problem of a recurrence of symptoms after an adequate thyroidectomy, that is, where a nubbin of gland the size of the end of one's thumb only is left on either side. Many recurrences are cured by the removal of an unsuspected focus, as Dr. Douglass has so graphically described in the case of infections of the gall bladder. We are therefore very careful in our search for infection and its removal before dismissing our goiter patients.

BIBLIOGRAPHY

1. Bailey, H. T. Laryngoscope 1925. Volume 35. Page 711.
2. Quoted by Bailey, H. T.
3. Osburne, O. T. Boston Medical and Surgical Journal, 1924. Volume 191. Page 1151.
4. Beck Southern Medical Journal. Volume 11. Pages 492-494.
5. Ochsner, A. J. and Thompson, P. L. Surgery and Pathology of Thyroid and Parathyroid Glands.
6. Cole, W. A. and Womack. J.A.M.A. 1928. Volume 90. Page 1274.
7. Quoted by Cole and Womack.
8. Abram, Israel, Medical Journal and Record. April 6, 1927. Pages 442-444.
9. Langstroth, F. W. International Journal of Medicine and Surgery, 1924. Pages 153-155.

NEW BOOKS

Applied Electrocardiography. An Introduction to Electrocardiography for Physicians and Students. By Aaron E. Parsonet, M.D., F.A.C.P., and Albert S. Hyman, A.B., M.D., F.A.C.P. With a Foreword by Harlow Brooks, M.D., F.A.C.P. With 120 Illustrations. The Macmillan Company, New York.

An Introduction to the Study of Human Anatomy. By R. J. Terry, A.B., M.D., Professor of Anatomy, Washington University, St. Louis. The Macmillan Company, New York.

The Treatment of Diabetes Mellitus. With Higher Carbohydrate Diets. A Textbook for Physicians and Patients. By William David Sansum, M.S., M.D., F.A.C.P.; Percival Allen Gray, Ph.D., M.D.; Ruth Bowden, B.S. Harper's Medical Monographs. Harper & Brothers, Publishers, New York and London.

Diseases of the Blood. By Paul W. Clough, M.D., Associate in Clinical Medicine, Johns Hopkins University. Harper's Medical Monographs. Harper & Brothers, New York, Publishers.

Ohio's new $5,000,000 state office building will be erected in the Columbus Civic Center on the Scioto River front, bounded by Front, Broad and Town Streets, the state office building commission, appointed by Governor Cooper to carry out the provisions of the act passed by the Eighty-Eighth General Assembly, has decided. The new office building will house many departments of the state government now located in buildings scattered throughout the city, including the State Department of Health, State Department of Public Welfare and the State Department of Industrial Relations, which administers the Workmen's Compensation Fund.

Some Phases of Modern Obstetrics

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HISTORY informs us that obstetrics has had a long hard struggle to obtain the position which it occupies today as a major branch in medicine. Modern obstetrics is practiced among civilized nations, and is in marked contrast to that found in uncivilized countries. We speak of modern obstetrics somewhat in the nature of experimental obstetrics, as the last two decades has brought forth many improvements in the care of the parturient woman, especially so in our technique. Two marked innovations have come to us, namely, rigid asepsis, and prenatal care. Examination of women before marriage, birth control and sterilization of the unfit will sooner or later become three paramount questions for thinking people to consider very seriously from the public welfare standpoint. The profession is a unit in advocating care and treatment of women before labor. Thousands of lives are saved yearly by the recognition of physical disabilities on the part of patients by attending physicians who are able to map out proper courses in given cases.

Baumm places little value on pelvic measurements. He advocates external measurements by means of the hands. Facing patient, grasps the iliac bones with both hands, the tips of thumbs on anterior superior spines and index fingers encircle iliac bones. He claims he determines the width of pelvis by the distance between the two hands—the depth by the distance between thumbs and index fingers, and the more the thumbs and index fingers are stretched, the deeper the pelvis. No one today claims that pelvic measurements are accurate, but they do give us a fair idea of the shape of pelvis, and it seems to me that Baumm's method will not be adopted.

Thomas has developed a modus operandi of Roentgen pelvimentry which is an attempt to accurately measure the superior strait, and this will be of the utmost importance when they determine the exact position to place patient to get a satisfactory Roentgenogram.

That syphilis produces many an unsuspected and unlooked for complication cannot be denied, and the Wassermann's and precipitation tests at times demonstrate that, regardless of the history or social status of patient, modern medicine says blood examinations are indicated. Colles law given to us in 1837, that a congenitally syphilitic child cannot infect its mother, but can give syphilis to another woman is only too true.

When an operation is indicated on a woman in the child bearing age, it is imperative to know that a pregnancy does or does not exist, as it is fully appreciated that the presence of pregnancy militates somewhat against an operation. However we also appreciate that procrastination with pronounced surgical pathology is detrimental to the best interest of mother and child. Mussey reports that in a large number of women patients that came to the Mayo clinic for surgery, that in 2 per cent a pregnancy was found.

Maternity hospitals are increasing very rapidly, and women are seeking hospital environment as never before. It is estimated that 30 to 40 per cent of our women are now confined in maternity hospitals, and especially is this noted in the larger cities. It is now rare that we hear of the delivery room being below standard in asepsis, and in the preparation of patient.

Medical students today have unsurpassed facilities to gain a good working basis fitting them to properly care for obstetrical cases. Whether moving pictures will be introduced as a means towards having the students grasp the fundamentals of technique, is a question for the future to decide as to its practicability, and value as a teaching asset.

The midwife question is still a mooted one, and our profession is in a quandary just how best to solve it. That midwives are a necessity in our scattered sections and to many of the foreign born is granted. A study of this question in Norway and Sweden shows that their midwives receive far better instruction than do ours in the United States, and that in one year in Norway they attended 85, and in Sweden 84.3 per cent of all births. Bowdoin studied the midwife status in the United States in the State of Georgia.

In 1924 there were 2,675 midwives registered, but he believes there are about 5000. They delivered in 1927, 20,794 babies—with 19,384 live infants. Many of these Georgian midwives are colored women—so ignorant that at least half of them cannot read or write. The more we study actual conditions the more we see the necessity of better training of women who desire to become midwives, and for the next few years that probably will be the temporary solution.

MATERNAL MORTALITY

We have been told that our maternal mortality next to Chili in the highest of any civilized country. That we are one-third higher than that of England, and twice as high as Denmark, Italy, Japan, The Netherlands, New Zealand, and Sweden. Also we have not shown any evidence of improvement in our maternal mortality during the past ten or twenty years. Such statements are naturally accepted with some credence on our part as to their accuracy. I feel that there

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must be some difference in the methods adopted in collecting these statistics, especially so when we read that these statistics were gathered during the influenza epidemic of 1918, and were part of the propaganda to put over the Shepard-Towner Bill.

In the death registration area of the United States during 1921, we note that 40 per cent of our maternal deaths were due to sepsis, 27 per cent to toxemia, 10 per cent to surgical procedures such as instrumental delivery, Caesarean section, and version, and 23 per cent to the accidents of pregnancy such as abortion, ectopics, hemorrhage, embolus, etc.

England is also concerned over their high mortality rates. Mr. Chamberlain, the Minister of Health, recently stated that "we are spending $10,000,000 of public money, and large voluntary subscriptions every year on maternity and child welfare services. We have a marked lowering in infant mortality, but the maternal mortality for twenty years has remained about the same, namely, four deaths per thousand births, and one of the principal causes for same was puerperal infection."

Governmental statistics tell us that in Vermont, New Hampshire, and Oregon, 100 per cent of obstetrical cases are attended by physicians, and that there are no midwives practicing there. In Wyoming 92 per cent are attended by physicians. New Hampshire has a maternal death rate of 7.1; Vermont, 6.8; Oregon, 7.2; and Wyoming, 9 per cent per 1000 live births. These rates are higher than that of the birth registration area, which is 6.4. If we accept these statistics as reliable then we must seek elsewhere, and not hold the midwife responsible. My explanation of one potent factor causing this high mortality is that the public at large do not, or will not realize the necessity of consulting their physician as soon as they know, or believe they are pregnant, and that such a condition can only be changed by educating the public as to the inestimable value of prenatal care.

Pituitrin was introduced some years ago, and the profession of today holds diverse opinions as to its value. Some maintain that pituitrin is a dangerous drug, that it is a potent factor in the production of extensive lacerations, of rupture of uterus, of infant paralysis, and of intracranial hemorrhage. The other side looks upon pituitrin as a boon to motherhood, and says that when judicially used it does no harm, and is an assistant in birth of child, and that it has practically done away with forceps in their practice. Time, plus experimental work will undoubtedly throw light upon the use or non-use of pituitrin in the second stage of labor. All agree, however, that pituitrin is useful following the emptying of uterus, provided there be no complications present. If pituitrin is used it must be intramuscularly, not intravenously.

Forceps (low and mid) are used with greater frequency than heretofore. The profession, however, is now almost a unit in condemnation of the true high forceps application, and it is seldom that we see or hear of an attempt being made to apply forceps when the head is above the brim. Such an attempted application is looked upon as fraught with much danger to both mother and child. Among the evil results which may occur, are rupture of uterus, air embolism, fracture and separation of pelvic bones, extensive lacerations of bladder, rectum, and vagina.

Lacerations I believe occur more frequently than is stated in our modern text books. We are now interested in the question of the advisability of not only doing immediate repair of perineum and cervix, but of repairing old lacerations as a primary operation. There is a tendency, however, to accept all immediate repairs, new and old, with a degree of reluctancy. Compiled results will point out the proper course to follow.

A revival of the so-called "twilight sleep" has been an incentive to the profession to devise some method to alleviate the pain during the second stage of labor. Many methods, drugs, and anesthetics have been suggested and tried, and from present reports it appears that no uniform procedure will be adopted for many years to come.

No operation in modern times can equal that of Caesarean section from the standpoint of results when the patient is Caesareanized by the capable surgeon for some logical definite obstetrical indication. Unfortunately the indications for the performance of Caesarean section have multiplied so rapidly of late, that when a noted obstetrician said "no pathological condition connected with obstetrics seems immune to those who are anxious to make a Caesarean section", he stated an actual fact.

The frequency of Caesarean section has now become a question of grave import, and is reflecting upon the honesty and standing of the profession. I copy from the late Dr. Mosher's paper on Caesarean section: "In the Jefferson Hospital, 362 deliveries in 1924—55 Caesarean sections, an incidence of 1 to 6. In the Boston Lying-In there were 1,123 births, with Caesarean section in 92, an incidence of 1 to 12. In Bellevue Hospital, N. Y., 4,286 births, 44 Caesarean sections, 1 to 97. In the N. Y. Lying-In, 3,511 labors, 6 Sections, 1 to 585. In Johns Hopkins, 875 births, 1 to 125. Swedish Hospital, Minneapolis, 1,667 births, 8 sections, an incidence 1 to 201. Burnside Hospital, Toronto, within 8 years 6,982 births, 8 Caesarean sections, an incidence of 1 to 861. The interesting fact of these figures is again the obstetrical conscience. The selection of cases for Caesarean section showing an incidence all the way from 1-6 in Jefferson, 1 to 12 in Boston Lying-In, — to 1-631, Minneapolis General, and 1 to 861 in Toronto, is a remarkable contrast. Caesarean sections in the hands of

those qualified give a low mortality rate, ranging from 1 to 5 per cent, depending upon the indication for its performance, and the condition of patient. Caesarean operations by those not qualified naturally give a mortality that is appalling." Newell "reported a survey of hospitals within a radius of 40 miles of Boston, revealing 100 Caesarean sections with 100 per cent mortality; in the majority of these tragedies the fact that Caesasean section has been done did not appear in the report."

In a letter from Dr. William H. Davis, chief statistician for Vital Statistics of the Census Bureau, dated April 5th, 1926, are the following figures showing that the deaths from Caesareans are increasing in this country year by year: In 1921, 247 deaths were reported in the United States; in 1922, 266; in 1923, 285; and in 1924, 304. While these are doubtless far from correct since many deaths will be reported as from septicaemia, hemorrhage, or other coincident causes, the figures are suggestive as demonstrating the increased recorded mortality of 22 per cent in four years.

Obstetricians constantly call attention to the vast difference in the risk and mortality rate between a clean case, one that has had one or more vaginal examinations, ruptured membranes, and where forceps or version have been attempted, and the badly infected cases. Polak calls attention to the presence of infective bacteria in the cavity of uterus which may at any time be a source of infection even in the clean cases. In Massachusetts in 1921, Caesarean section had displaced eclampsia as the second most frequent cause of death among parturient woman.

Mosher says "the variation between 2 to 10 per cent in hospitals cannot all be due to difference in operative ability, nor to any other causes than careless and reckless neglect of obstetrical principles." Polak says "Caesarean section has been carried to such an extent that even the physiological process of normal labor is being disturbed. Some have so widened the indications for Caesarean section that this method is being employed for no real obstetric reason, simply because it is the quickest and the most convenient way of getting the baby out of the uterus."

It is not modern obstetrics that says when a woman is badly infected, or the baby is dead, that a Caesarean section should not be thought of, that is simply having common sense, and a knowledge of the rudiments of surgical pathology. I believe that the time will soon come when there will be a return to wellknown obstetrical mechanical principles, and I also believe and suggest that a good rule worth adoption would be, no Caesarean section without consultation, and one at least of the consultants should be an obstetrician. Once a woman has had a Caesarean section all future pregnancies mean an added risk to her, and great care and watchfulness should be exercised throughout her subsequent pregnancy and labor.

The remarkable diminution in eclamptic cases since the introduction of prenatal care has demonstrated that the old Chinese Axiom: "Treat patients before they are sick," is practicing common sense, yet it took so-called enlightened people a long time to appreciate its significance. In well organized clinics eclamptic cases are now seldom seen, and it is predicted that like typhoid, this variety of toxemia will soon be met with only occasionally. One hundred years ago the treatment of eclampsia was morphia, catharsis, and blood letting, and today we still rely upon morphia, catharsis, and occasionally blood letting.

We realize that as long as we are in the dark as to what causes the toxemias of pregnancy our treatment will be more or less theoretical, and we must rely upon those drugs or means which experience tells us are beneficial. The kidneys must not be overlooked in pre-eclampsia, as adequate treatment will usually suffice to carry patient to term in the majority of cases, and the termination of pregnancy may not be called for. The role that blood sugar plays, and the disturbance in carbohydrate metabolism in the toxemias is still in the experimental stage. It is now stated experimentally that eclampsia is due to a disturbed maternal carbohydrate metabolism, a deficiency of carbohydrate intake with an increased consumption of carbohydrates, the result being a depletion of glycogen stores, hence a damage to the liver, like unto that of a partial extirpation; therefore appropriate treatment suggested would be somewhat as follows: quiet, isolation, morphine by hypodermic injection, chloral hydrate by bowel, and magnesium sulphate.

Stander in his experimental work says that magnesium sulphate when administered in large doses is toxic and may produce death, and states that the non-toxic dose should not exceed 0.1 Gm. per kilogram of body weight. It is further advised to give it intra-muscularly, not intravenously. It is also suggested that an intravenous hypertonic glucose solution of 50 gm. in 200 c.c. of distilled water (about a 25 per cent solution) be given, and repeat in four or five hours if necessary.

Barnes stated many years ago that when the uterus was empty the convulsions ceased, in the majority of cases, hence the practice of early and quick delivery through the natural passages so extensively practiced. Greenhill states that in the Chicago Lying-In hospital most of the specialists favored emptying the uterus whenever they saw fit after the first convulsion. Caesarean section for eclampsia yields a very high mortality, namely, 40 per cent, and the only indication I see that calls for it is, when in the presence of a long unyielding non-dilated cervix.

Sepsis now considered almost preventable is still in many incidences an enigma. It is fully understood that contact with diseases such as tonsillitis, nasal infections, measles, scarlet fever, erysipelas, etc., and the autopsy room should bar one from immediate attendance upon obstetrical cases, yet its gravity too frequently does not meet with the appreciation it deserves.

Since the inauguration of an era of aseptic technique, epidemics of puerperal sepsis are infrequent, yet regardless of precautionary measures we do have an epidemic here and there as of yore. In 1927 an epidemic of puerperal fever occurred in the Sloane Maternity Hospital, New York City, where 15 per cent of all parturient patients were attacked by the disease, with a 33 per cent mortality, the offending organism being the hemolytic streptococcus. Twenty of the 100 nurses, two out of the 26 physicians, and three of the non-professional employes of hospital were found to be carriers. Not one of the puerperal fever patients yielded positive nose or throat cultures, and only two of the well patients. It was determined that the organisms entered the patients by vagina, just before, during, or after delivery, and that every patient but one died who had a positive blood culture. The profession as a whole should feel that Drs. Watson, and Meleny, and staff deserve credit for publishing their records in detail, and one of their recommendations namely, wearing a mask to cover both nose and mouth at all deliveries, should be taken very seriously.

Following the birth of baby we are then dealing with a large traumatised vaginal surface, and in many of our cases, more or less lacerations of cervix and perineum. The hurry to deliver placenta, traction upon the cord, and above all the introduction of hand into vagina or uterus to make a manual extraction, is fraught with much danger. A true retained placenta is a rare complication, and it is far better if any difficulty be met at delivery, to cut and tie the cord, then wrap its severed end in a piece of gauze, wait a few hours and then express placenta, than to primarily introduce the hand into the uterus. A contracted uterus following the administration of pituitrin or ergot with the placenta still in situ, may change a normal into an abnormal case. Mr. A. W. Bourne, Obstetric Surgeon to Queen Charlotte Hospital, calls attention to the necessity in modern hospitals for an isolation block which could be devoted to septic cases.

Puerperal fever may be defined as an acute febrile condition developing after parturition, in which the endometrium becomes involved, and it is usually complicated by myometritis, salpingitis, peritonitis, and thrombophylebitis. It is therefore impossible to gain an opinion as to the value of serums, if they be used in those cases of elevation of temperature who have not definite evidence of uterine infection.

Lash in his conclusion (Am. Jour. of Ob. and Gyne., 1929) says that "the therapeutic value of an antitoxic serum is dependent on its specificity, potency, and lack of serum reactions, and that the puerperal fever streptococcus antitoxin possesses specific value in acute endometritis with septicaemia due to the hemolytic streptococcus". He also says to get results the antitoxin should be given early, and not wait until it is apparent that the prognosis is unfavorable. We hope Lash's deductions will be of value, as the use of serums so far has been most disappointing.

When that day comes when there is cooperation between the public and the medical profession, when there is a realization af the importance of obstetrics, then, and not until then will we see a marked improvement in our obstetrical results.

19 WEST SEVENTH ST.

The Clinical Interpretation of Vertigo*

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DIZZINESS is one of the most common complaints met with in our daily practice. It is also one of the vaguest of complaints, because it comprises, at least from the patient's standpoint, a multitude of sensations most of which we cannot accept as real vertigo, such as a feeling of faintness or weakness, a darkening of the visual field, etc.

Vertigo is a complex phenomenon consisting, in a last analysis, essentially of two components. These are first a component of feeling and second a component of motion. Both of these components are purely subjective in nature and that is the reason why a definition of vertigo is so difficult and so unsatisfactory. The feeling of dizziness is mostly an unpleasant one and the element of motion is only an apparent motion of the patient's own body or of his surroundings. This apparent motion produces, if it reaches a certain intensity, a sensation of a disturbed orientation in space, a disturbance of equilibrium.

The mechanism concerned in the production of vertigo can be understood only by a clear conception of the physiology of equilibrium. Our orientation in space and therefore our equilibrium is at all times, whether at rest or in motion, assured to us by an harmonious cooperation of three equilibratory apparatuses:

(1) The labyrinth, (2) The ocular apparatus, (3) The organs of deep sensation. Messages from

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these three sensory organs are constantly carried inward to certain subcortical association centers, chiefly to the cerebellum and the red nucleus, which associate and utilize these afferent impulses in regulating and coordinating our muscular movements. This brings about physiological equilibrium. From these subcortical centers the associated impulses are transmitted as a whole to some cortical center or centers and are in this manner brought to consciousness, which is not able to dissociate individual equilibratory components, but perceives as a psychological unit the state or feeling of equilibrium. This is the psychological equilibrium. Only in this way can we explain why pathological conditions not only of the peripheral sense organ, but also of the afferent tracts from the latter to the subcortical centers and affections of these centers give rise to a disturbed static consciousness, and this feeling or sensation of a disturbance of equilibrium we call vertigo.

The three above named sense-organs concerned in the maintenance of equilibrium are by no means functionally equivalent. It is generally known that deep sensation informs us about the location of our limbs and their relation to our body, whereas the vestibular apparatus informs us about the relation of our head and thereby of the body as a whole to space.

These three equilibratory sense organs are also not equally responsible for the production of vertigo when pathologically affected or unduly stimulated.

We know for instance that the most severe disturbances of deep sensation will not cause the slightest dizziness. A tabetic with a most pronounced ataxia will not be able to maintain his balance, but he will not be dizzy. The slightest disturbance of the labyrinth or rather the vestibular apparatus, however, will throw our static security into disorder and will thereby produce dizziness. Vertigo, occasionally complained of by patients with a disturbance of their oculomotor apparatus is, on account of the intimate relationship of the latter to the vestibular apparatus, most probably ultimately of vestibular origin.

We are therefore perfectly justified in saying that a disturbance of the apparatus of equilibrium will cause dizziness only if the vestibular apparatus is simultaneously involved.

To understand more clearly the mechanism of vertigo we must turn our attention to the vestibular apparatus and discuss briefly its anatomy and physiology. Under vestibular apparatus we understand the peripheral sense organ or labyrinth consisting of the three semicircular canals, the utriculus and sacculus, the vestibular nerve carrying the impulses from the labyrinth to the primary end-stations consisting of three nuclei in the medulla, and finally the secondary neuron arising from these nuclei. Of these three primary end-stations Deiter's nucleus is functionally the most important one. Fibres from this nucleus pass by way of the posterior longitudinal bundle to all the occulomotor nuclei, thus establishing the vestibulo-occular reflex arc, which forms the anatomical basis for vestibular nystagmus. Another tract of fibres originating from Deiter's nucleus is the Deitero-spinal tract connecting this nucleus with the anterior horn cells of the spinal cord. By way of this tract the labyrinth exerts its influence on the musculature of the body especially on its tonus, designated by Ewald as labyrinth-tonus. When abnormally stimulated this reflex arc is responsible for the so-called falling reactions and also for pastpointing.

Finally, there are, according to Ramon Y. Cajal, fibres from Deiter's nucleus to the cerebellum. Some fibres of the vestibular nerve pass without any interruption directly to the cerebellum. This constitutes the vestibulo-cerebellar tract; along this path and its further continuation to the cerebral cortex go the impulses which produce the sensation of vertigo.

It is hardly sixty years since we are acquainted with the fact that a portion of the inner ear, designated as the labyrinth, functions as a sense organ to preserve our static and dynamic equilibrium. The sum of the impulses emanating from the labyrinth has often been called our sixth or static sense.

In a discussion of vertigo we are therefore chiefly interested in the function of the semicircular canals containing in their ampullae the specific sense organ of equilibrium. The adequate stimuli for this sense organ are the movements of our head thereby producing a current in the endolymph which stimulates the specific hair cells containing the end filaments of the vestibular nerve. The three semicircular canals thus take cognizance of rotary movements of the head and the body in all conceivable planes.

The impulses arising in the semicircular canals are transmitted along the nerve paths described above to the cortex of the brain, where they create a conscious perception of the rotary movements of our body and its position in relation to space. Besides this conscious sensation, the static sense organ, like any other sense organ, produces some reflex actions which serve the unconscious regulation of the movements and balance of the body. The nerve paths used for these reflex actions have been mentioned above as the vestibulo-ocular and the vestibulo-spinal reflex arcs. Especially the vestibulo-ocular reflex is of great practical value and therefore deserves some discussion. When the labyrinth is stimulated normally by turning our head or body an impulse is sent at the same time by way of the vestibulo-ocular reflex arc to the oculomotor nuclei and thence to certain conjugately working eyemuscles. The purpose of this normal impulse to the eyemuscles is to retain the visual field at the beginning of the turning; for, if the eyes were to

move along with the head, dizziness would ensue with the slightest movements of our head. Immediately after this short fixation of the former field of vision the eyes are jerked along in the direction of the turning to fix the new field of vision. If the semicircular canals are stimulated excessively by prolonged and quick turning, as in the turning chair, then we see a series of these movements of the eyeballs, and the lagging and the jerking along follow each other in quick succession. This phenomenon we call a nystagmus. At the same time we get dizzy because through discordant equilibratory impulses there arises a disagreeable confusion of our static consciousness.

Another of the vestibular reflex mechanisms is represented anatomically by the vestibulo-spinal reflex arc. By way of this path impulses from the labyrinth are constantly flowing practically to the entire musculature of the body. These impulses normally provide the musculature en masse with the tonus necessary for the maintenance of the balance of the body in any position or during motion. Under excessive stimulation or under pathological conditions this reflex mechanism causes certain reaction-movements such as falling reactions or tendency to fall, and the recently much discussed pastpointing.

Still another reflex effect of an overestimulated or pathologically affected vestibular apparatus is the nausea and vomiting which often accompany vertigo. The corresponding reflex arc has never been demonstrated anatomically, but has been postulated physiologically and clinically by assuming some connection between the vestibular nuclei and the nuclei of the vagus.

Summarizing the foregoing considerations for the purpose of clinical application we may say: True vertigo is always due to over-stimulation or pathological affection of the vestibular apparatus either peripheral or central; it is the only direct vestibular phenomenon not having the character of a reflex. Being a highly subjective symptom vertigo is of only limited clinical value, but gains the importance of an objective symptom by the co-existence of some of the reflex phenomena of vestibular irritation or destruction such as nystagmus, falling reactions and pastpointing.

SYMPTOMATOLOGY AND DIAGNOSIS OF VERTIGO

True or vestibular vertigo assumes two distinct forms: (1) Turning dizziness by which we mean the apparent rotation of the patient's surroundings or of his own body. (2) Tactile dizziness which includes all the optical illusions and misinformations by the sense of touch as to the location of the patient's body or the external objects he is actually in touch with.

For the purpose of delimiting the subjective sensations of turning vertigo, Hitzig speaks of systematized vertigo, when during an attack of dizziness the apparent rotation of the patient's surroundings or of his own body constantly occur in a definite direction. The patient may not be able to state this direction, but he almost always will be able to tell whether this direction is constant or not. This systematized dizziness is the only form produced experimentally by turning or douching, and it is very characteristic of spontaneous labyrinthine dizziness. We often hear patients describe as dizziness certain sensations of a to and fro movement or of haziness of surrounding objects. While such sensations are anything but characteristic of vestibular vertigo and are much more frequently due to errors of ocular refraction or double vision, still they may occasionally be stated by patients with true vestibular dizziness; we often feel this to be the case with patients of low intelligence, who are not capable of observing or describing their sensations. Be this as it may, we can say with certainty that turning, systematized dizziness is always a focal symptom of diseases of the vestibular apparatus.

Tactile dizziness has been thoroughly investigated by Brunner in Alexander's clinic. He distinguishes two clinical manifestations: (1) Delusions as to the position of objects within the tactile area; patients for instance will complain that in the attack of dizziness the floor or the bed assumes a slanting position, and they become frightened of falling out of bed. Bechterew has reported cases in which the patients stated that, in a dizzy spell, rough surfaces appeared to them smooth and smooth surfaces rough and wavy. (2) The second manifestation of tactile dizziness includes illusions as to the position of the patient's own body, i.e., sensations of lateropulsion, (Babinski and Nageotte) and the laterotraction of Brunner.

For a long time it was believed that turning dizziness was the only form of dizziness characteristic of diseases of the vestibular apparatus, because the tactile dizziness was frequently met with in neurasthenics. However, most authorities on the subject at present are of the opinion that tactile dizziness is not at all rare in vestibular affections. This is especially true of chronic diseases of the vestibular apparatus, while the acute diseases are much more frequently associated with turning dizziness. Turning dizziness is almost always associated wtih a spontaneous nystagmus and the direction of the apparent turning is mostly in the direction of the quick component of the nystagmus. Tactile dizziness is but rarely associated with nystagmus. Patients with lateropulsion complain that they are being pulled to one side or another by some unseen force. In these cases we almost always find pathological changes in the region of the distribution of the central vestibular apparatus such as occur with multiple sclerosis, syringobulbia, tumors of the posterior cranial fossa, etc.

Occasionally one encounters both tactile and

turning dizziness associated in one and the same patient. Brunner maintains that lateropulsion in his experience always occurs to one or the other side of the patient's body, never forward or backward; that, in the latter instance, we are always dealing with a functional affection.

We see the most severe degrees of dizziness in the very acute diseases of the vestibular apparatus such as hemorrhages, when we speak of vestibular apoplexy. These patients frequently fall to the ground at the onset of the attack and are unable to move without the greatest discomfort. Here, also, the vestibular reflex phenomena find most pronounced expression in the form of incessant vomiting and a marked nystagmus, usually of the third degree.

Since turning dizziness is primarily a focal symptom in diseases of the vestibular apparatus, we find it in diseases (1) of the labyrinth (2) of the vestibular nerve (3) of the area of Deiter's nucleus in the medulla (4) probably also of the cerebellum.

(1) While this is not the place to enter into a discussion of the special pathology of the labyrinth, a few fundamental facts are of great general importance. Diseases of the labyrinth always produce that typical form of vertigo which Hitzig aptly designated as systematized dizziness. In contradistinction to central vertigo this peripheral or labyrinthine vertigo is very often provoked or at least aggravated by movements of the head, whereas the attacks of central vertigo occur mostly spontaneously without any external cause. An acute destruction of a labyrinth as by a hemorrhage or trauma, causes a most characteristic and constant symptomcomplex: deafness, a most severe systematized turning dizziness and the whole ensemble of reflex vestibular phenomena; the nystagmus being always horizontal-rotary and toward the healthy side. The dizziness and nystagmus reach their climax in two or three days and then abate gradually to disappear entirely in about two weeks. This symptom complex was first observed and described by Meniere in 1861, who, however, did not observe the nystagmus. The term "Meniére's disease" has been dropped in late years, since its symptomcomplex has not been found to be pathognomonic of any one location or any one kind of affection. We rather speak today of a Meniére's syndrome.

(2) Affections of the vestibular nerve, which in pure form are rather rare, present at least as far as vertigo is concerned, the same symptomatology as diseases of the labyrinth. Several infections or intoxications are said to produce an isolated vestibular neuritis, but this never has been actually proved.

(3) Of the diseases involving the area of Deiter's nucleus we have to distinguish for our purposes the acute affections from the chronic ones. The acute diseases, of which the principle ones are enephalitis and hemorrhage or thrombosis of the posterior inferior cerebellar artery, are characterized by severe dizziness compelling the patient to lie absolutely quiet in bed. Nystagmus is almost always present, especially in the latter affection, in which the predominant symptom is an almost incessant vomiting. I have seen a case of thrombosis of the posterior inferior cerebellar artery, where the constant retching and vomiting soon caused a profuse hematemesis due probably to rupture of some varicose veins at the cardiac end of the stomach. A prominent internist, called in consultation, was so impressed by this hematemesis that he thought all other symptoms could be disregarded, and he diagnosed this a case of ulcer or cancer of the stomach. The vomiting together with the dizziness soon let up and ceased altogether in about two weeks. An *X*-ray examination of the stomach proved entirely negative and at present, three years after the cerebral insult, he is perfectly well with the exception of an occasional mild attack of dizziness.

Of the chronic affections involving the region of Deiter's nucleus the most important one is multiple sclerosis. Here we often find real turning dizziness, although tactile dizziness, at times in the form of lateropulsion, is not at all rare. Frequently an early symptom vertigo occurs at some time or other in three-fourths of all cases. Well known in literature is Charcot's case of widespread sclerosis of the spinal cord and brainstem with an intact large brain; this case presented dizziness as the only cerebral symptom. Charcot mistook this case for a spastic spinal paralysis, because he disregarded the important symptom of vertigo—this according to his own statement. Vertigo in multiple sclerosis occurs mostly spontaneously in attacks, and is only occasionally provoked by certain positions of the head.

(4) It is a known fact that diseases of the cerebellum very frequently cause real dizziness, but it has been disputed whether this dizziness is a focal symptom or whether it is produced by pressure on the vestibular apparatus which is located immediately below the cerebellum. It is true that vertigo is more frequent and much more pronounced in diseases of the cerebellum causing an increase in intracranial pressure like tumors, and the opposite is true of diseases not causing such pressure. From a clinical viewpoint, however, this discussion is, I believe, entirely irrelevant.

Having discussed vertigo as a focal symptom of the various portions of the vestibular apparatus the question arises now, is it possible to differentiate by the symptom of vertigo alone between diseases of the different parts of the vestibular apparatus? Only the duration of the dizziness can be utilized in such a differentiation. If the dizziness lasts but a short time and then

disappears entirely, we are most probably dealing with an acute affection of the labyrinth. But, if the dizziness occurs in attacks for many years, it is very likely caused by a disease of the central nervous system. Much more information can be obtained by taking into consideration the reflex phenomena of the vestibular apparatus and especially the various functional labyrinthian tests. But this is beyond the domain of my paper.

Besides affections of the vestibular tract there are a great many diseases of various organs, in which true vestibular vertigo is represented in their symptomatology. How can we bring this to harmonize with our former statement that every true or turning dizziness is due to a disturbance of the vestibular apparatus? We shall see presently that dizziness in these diseases is caused by a secondary disturbance of the vestibular apparatus, usually circulatory in nature. It is known that diseases of the large brain, especially tumors, are frequently associated with vertigo. Brain tumors of any location are productive of vertigo which has the significance not of a focal, but of a general symptom like headache or choked disc. Fischer and Alexander and others have demonstrated beyond any doubt, in a large series of anatomical preparations, that an increase in intracranial pressure causes, by way of definite communications between the peri- and emdolymphatic spaces of the labyrinth and the subarachnoid space, pressure changes in the former and consequently also structural changes in the labyrinth itself. The pathological changes produced in this manner and the vestibular symptoms conditioned by them they called in analogy to choked disc, choked labyrinth.

Dizziness in arteriosclerosis, hypertension, nephritis, migraine, and many other diseases is brought about in a similar manner by vasamotor disturbances and blood pressure changes in the labyrinth. Also the dizziness frequently met with in the various neuroses does not, according to detailed investigations of Leidler and Loewy, differ in principal from labyrinthine dizziness. They have repeatedly demonstrated in these neurotics disturbances in the vegetative nervous system, which they have found to be responsible for vasomotor disturbances in the labyrinth.

In conclusion I should like to call your attention to the intimate connection of the physiology and pathology of the inner ear with neurology, a connection already indicated by the term oto-neurology; unfortunately a much neglected branch of neurology in this country, oto-neurology has already disclosed many valuable diagnostic avenues for the neurologist with still greater possibilities for the investigator of the future.

3912 PROSPECT AVENUE.

DISCUSSION

S. S. QUITTNER, M.D., Cleveland: The symptom vertigo, as we all know it, is almost as common a complaint as headache. Yet (until comparatively recently) it was so generalized that the full purport of its significance was never utilized as a diagnostic symptom.

With the advent of the knowledge that the inner ear contained within its small confines an anatomical division that had to do with equilibrium- then only was the subject of dizziness rationalized. With this beginning the vestibular pathways, centers and arcs (as Dr. Baumoel so ably pointed out) were gradually evolved.

While there is much yet to learn about vertigo, at least one fact stands out, namely, that systematized vertigo has a definite pathological meaning and can be analyzed for definite diagnostic purposes.

Because vertigo is a subjective symptom it has limitations (per se), of diagnostic significance. However, if one sees the subjective concomitants then these can be used in interpreting vertigo itself.

The inner ear produces two distinct reactions on stimulation by any of the known methods, as cold or warm water douching, turning on electric current. These two reactions are nystagmus and vertigo. T he reactions of both in a normal individual are definite and systematic. The deviation is of diagnostic importance. Vertigo is measured by its objective signs of past-pointing or falling.

The subject is large and one must necessarily call a halt in this discussion. But is apparent that the otologist and neurologist must from now on make more contact. The otologist must be consulted because he must interpret the external, middle and inner ears or else (in event of definite disease in this area) the clinical picture will be wrongly interpreted or in using douching tests, be a positive danger to the patient's life.

Practically (as an otologist) I should like to mention a fairly common event. Dizziness may vary from a feeling of wavering to a distinct unsteadiness due to altered internal ear pressure from closure of the Eustachian tube. Relief is at once obtained by its inflation. This is more common than is generally known.

Again in this connection a thought has been expressed that in submerged swimming or diving it may be possible that an occasional drowning occurs not from so-called cramp or heart trouble but rather the sudden alteration of middle ear air pressure and consequent disturbed vestibular apparatus with disturbed orientation, floundering and then drowning.

Just one more thought which it seems to me should be of interest both from a neurological and medico-legal standpoint: That is traumatic neurosis, especially as related to injuries about the head. Dizziness is a very common complaint. How can one tell the malignerer? Alexander, of Vienna, says that if the patient has spontaneous nystagmus his vertigo is real. If he complains of a turning dizziness and there is no spontaneous nystagmus, do the simple head motion test. If it is positive his complaint is real. Also one should test for hyperirritability of the labyrinth. If present one can also say it is a real dizziness.

Four-fifths of the parents of babies who, during a recent period, were cared for at the baby-health stations of the Bronx, New York City, could not afford to pay doctor's fees, according to the report of the Bronx Committee of the New York Tuberculosis and Health Association on the economic status of 501 selected representative families using these stations.

Swimming Pool Sanitation

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SWIMMING pool sanitation can be divided into two main topics: (1) the care of the pool, the water in the pool, and the adjoining parts of the building; and (2) the control of the bather. The first has to do with the operator and the second with the instructor.

Let us for a moment examine some of the things that an operator has to do in his daily routine in the care of a swimming pool. The first question we must answer is: Who is the operator of a swimming pool? The operator of a swimming pool is that person who is responsible for the cleanliness and the temperature of the pool, the pool water, and the rooms that house the pool, the showers, and the lockers; and for the operation of the pool equipment. These duties may come under the authority of several people but they could rightfully be the responsibility of one person.

The temperature of the pool water must be such that the bathers are comfortable and still not so warm that bacteria will multiply rapidly. A range of 72°-78° F seems to be the best one for these purposes. The air must be warm enough so that the bather is not chilled while standing around in the pool room or while dressing in the locker room. The pool room should be 3° or 4° warmer than the pool water. Temperature alone is not enough, the rooms should be free from drafts.

Cleanliness—in the locker room means that the lockers and floors should be scrubbed frequently; —in the showers means that the entire room should be thoroughly washed regularly (at least daily and in some cases oftener) and the same applies to the pool room;—in the pool and of the pool water means that the bottom of the pool must be brushed at least daily, the scum gutters cleaned and the pool overflowed. It is especially important that the floors be kept clean to prevent tracking dirt into the pool.

The care of the equipment calls for a knowledge of what each part accomplishes in the treatment of the pool water. The hair strainer removes the large particles, the lint, and the hair; it protects the pumps from clogging and saves the filters. The hair strainer must be cleaned frequently. The pumps circulate the water and care must be given their motors. The alum pot adds a small amount of coagulent to the water ahead of the filters which aids in the filtration. The supply of alum must be replaced as needed.

The filters, a very important part of the purification system, must be watched closely. As the dirt and bacteria pile up on the sand bed it requires more and more pressure to force the water through the filter and the amount of water passing through the filter decreases. This loss becomes so great eventually that the flow must be reversed and the accumulation washed away to the sewer. The operator must know when to wash the filters and just how to do it or the filters will not do their duty when returned to service. After the filters we find the heater, which keeps the pool water at the proper temperature. The sterilizing unit, the most important piece of equipment and probably the one requiring the most attention, must not be neglected. The operator must know how to keep these functioning properly.

Merely turning a few valves and walking past the equipment now and then does not constitute a good operation. The man who knows why and how is the one who deserves commendation.

Now let us consider the instructor. The instructor has a very important duty to perform in a swimming pool. It is his duty to prevent pollution of the pool by the bathers, to prevent the spread of infection by the exclusion of those already infected, to prevent accidents by maintaining order, and to be able to act in all emergencies which might arise about a pool. This is a big order but it can be done.

Pollution of the pool by the bathers can be prevented first, by seeing that each takes a thorough shower, using soap. This shower should be taken before the bathing suit is donned. There are several ways that an instructor can be sure a good shower is taken. In all cases where swimming is by classes an attendance check can be made in the shower room, the instructor seeing each person as his (her) name or number is called. In cases where bathing is spasmodic and the instructor must be in the pool room with some swimmers while others are in the showers, a platoon system can be used. A good method is to appoint several conscientious bathers as shower attendants, making them responsible for a given group and let them see that each takes a proper shower bath. Inspection in the shower is not enough but as each person enters the pool room they should have to wait until the instructor can give them a final inspection.

Just how far should an instructor go with his inspection? In the first place he should look for bodily cleanliness. If the bather, who, knowing that a shower is compulsory, attempts to get by in a dirty condition, the instructor can expect to find other reasons for barring him from the use of the pool. Once assured that the bather is clean, visible evidence of infection should be

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sought. Indications of colds, eye, ear, nose, throat and skin infections are the most important. Under the Department of Health regulations, persons with any of the above indications can be barred from the pool. It is not necessary to prove that an infection is contagious in order to forbid the use of the pool to a bather, the mere presence of infection being all that is necessary.

For their own protection persons with abrasions or lesions of any sort must be barred from the pool. Covering of such lesions with adhesive tape in order to get by the inspection is also forbidden. Occasional inspection of the bathers feet should be made for plantar warts and ring-worm infections. Persons suffering from these should likewise be barred from the pool.

Further, the instructor can, by preventing spitting and spouting in the pool, keep out a large amount of bacterial pollution. Education of the bathers by the instructor can get them to use the scum gutters for throat and nasal discharges. The bathers must be taught to use the showers after going to the toilets.

Discipline and order must be maintained. Running, pushing, ducking, and improper conduct should not be tolerated. The instructor must prevent such actions or serious accidents are quite liable to result. He must be able to act in an emergency. He should be able to render first aid and understand water safety measures.

There are many things that an instructor must do. What are some of the things he can accomplish? One of the best results is the personal hygiene that the bathers learn. Increased numbers of swimmers and water safety people will reduce deaths due to drowning. Properly kept pool records will aid health departments in insuring good swimming pool sanitation.

In Detroit we have learned four general lessons from our study of swimming pools:

First—A system of reporting, rating and classifying pools must be established. This will put them on a competitive basis and the mere meeting of the standards will not satisfy; there will be a general attempt to get to the top of the list. As has been pointed out there is no uniformity among the various cities doing this work. Each has devised a system of its own and to date no single system can be pointed to as the best. Even the American Public Health Association report failed to suggest a method. There is also considerable variance of opinion as regards bacterial standards, and there has been extensive discussion of those proposed. The trend seems to be toward a water which will meet or come close to meeting drinking water standards.

Second—Definite regulations must be established and adhered to, despite the occasional hardship they may incur. In Detroit, we require that all persons who have colds, eye, ear, nose, throat or skin infections be refused admittance to the pool. As the persons who made the inspections are laymen, we do not allow them any latitude of judgment, requiring that they refuse admittance to all who do not appear perfectly well or who do not have a clear skin.

At this point let me relate our experience with plantar warts a few years ago.

During the middle part of October, 1926, our attention was called to the undue prevalence of a painful condition of the feet in one of the intermediate schools. An examination showed this to be due to "plantar warts".

In one school it was found that the number of cases and the case rate increased rapidly, in direct proportion to the length of stay of any class in that school building. In one school as high as 20 per cent of the upper classes were infected. Because of the gymnasium and swimming pool facilities the intermediate schools were used at night by the Department of Recreation for play classes of adults, and to a limited extent by children from other schools. It was found that this group was practically free from warts of the feet. Their attendance at the pools or gymnasium was but infrequent and covered but short periods of time.

PREVALENCE OF PLANTAR WARTS

Examination of pupils in an intermediate school about October 15th, 1926, gave the following:

Grade	7 B	7 A	8 B	8 A	9 B	9 A
% Infected	1%	3⅓%	5%	8%	8½%	10 2/3%

Examination of 170 of these same pupils about November 15th, 1926, showed no new cases. This after one month of control.

One school was used as an experiment. After a careful, rigid inspection all infected individuals were excluded from locker rooms, showers, pool, and gymnasium.

These rooms were scrubbed, washed with 1 to 1,000 bicloride of mercury solution, then dried and aired. All infected people were put under treatment by their private physician or hospital clinics.

Comparatively few new cases were found during the school year and at the end of May, it was found that all but two cases were reported as cured and returned to regular gymnasium work. No new cases were reported following this.

Similar conditions were found in several of the other intermediate schools. It was planned to use these schools as "controls" and institute no form of treatment or cleaning. However, this plan was not found possible since the school principals and health education directors took it upon themselves to employ the same methods as had been advocated in the school studied. A survey during June, 1927, showed but a very few cases in any of the schools of the city. We feel we are justified in advocating this system of rigid inspection, exclusion, and cleaning of

floors wherever plantar warts are found.

Third—The educational field in swimming pool sanitation not only includes the supervisors, instructors and operators, but that much larger group, the bathers. We must teach not only the operator how to control the chemical content of his pool, in the case of a chlorine treated pool the orthotolodine test for free or residual chlorine; but we must teach the bathers how by means of personal hygiene to prevent the pollution of the pool. In Detroit we publish every month a "Swimming Pool Review" which attempts to pass on to the bathers the story of swimming pool sanitation.

Fourth—The control of future construction is absolutely necessary to reduce the defects in our present pools. One of the important things in this connection is the protection of the public water supplies by preventing or controling cross connections between these supplies and the swimming pools. (See chart for proposed method).

We must not forget in all of this that the pools are built for the bathers to use and that it is our duty to see that they are safe and attractive.

Present Status of the Periodic Health Examination Movement

V. C. ROWLAND, M.D., Cleveland, Ohio

Note—The following paper on the above subject, prepared by Dr. V. C. Rowland, chairman of the special committee on Periodic Health Examinations of the Ohio State Medical Association, incorporates some of the ideas and suggestions which have been in the minds of this committee and through which the committee desires to repeat and re-emphasize the importance of the growing movement of periodic health examinations by physicians in their private practice as one of the important phases of popular preventive medicine.

The personnel of the Periodic Health Examinations Committee, under whose direction the paper is published, is as follows:

V. C. Rowland, Chairman	Cleveland
H. J. Powell	Bowling Green
C. A. Neal	Columbus
Willard G. Drown	Warren
E. B. Shanley	New Philadelphia

With the avowed policy of bringing the subject of periodic health examinations at least once a year to the attention of the members of our State Association, this committee endeavors herein to analyze the present status of the movement.

The idea of the health examination was first clearly expressed in England by Dobell in 1870. It was presented before the American Medical Association by Geo. M. Gould in 1900 and was brought to general attention by the examination of enlisted men in the World War and the finding of about 38% disqualified. Secretary Weeks on Preparedness Day broadcasted the message: "The best way you can keep the nation in preparedness is to go today to your family physician and have a thorough physical examination." In 1922 official approval was given by the House of Delegates of the American Medical Association at the St. Louis Session. The following resolution was passed unanimously.

"Whereas the need and value of periodic health examinations of persons supposedly healthy are increasingly appreciated by the public, it is recommended by the Council on Health and Public Instruction that the House of Delegates authorize the Council to prepare suitable forms for such examinations and publish the same in the *Journal* of the American Medical Association and that the county societies be encouraged to make public declaration that their members are prepared and ready to conduct such examinations, it being understood that the indigent only should be examined free of charge and that all others shall be expected to pay for such service."

This action was again approved by the House of Delegates in San Francisco in 1923, and again in Chicago in 1924. The manual was prepared and widely distributed. The movement represents a kind of evolution or shift of emphasis from community hygiene to personal hygiene.

PRESENT ACTIVITIES

Growth in recent years is evidenced by the activities of such men as Drs. Ray Lyman Wilbur, John M. Dodson, Haven Emerson, Samuel Lambert, Orlando Petty, David Riesman, E. P. Joslin, Wendell Phillips, Wm. H. Welch, Harlow Brooks, Gen. Hugh S. Cumming of the United States Public Health Service, General Ireland of the Army and many other leaders. The United States Public Health Service gave a radio broadcast on Periodic Health Examinations.

Insurance Actuarial statistics are especially interesting. One insurance company reported a 23 per cent reduced mortality rate over a 10 year period between 1914 and 1925 among their examined clients. Another large insurance company over a similar 10 year period reported an 18 per cent reduced mortality rate and this mainly in the age period from 40 to 60 years. The physical defects revealed by periodic health examinations were classified as minor in 12 per cent, moderate in 70 per cent and advanced in 18 per cent. At least 7,000,000 people or over 100,000 a year have had some kind of a health examination. It has been estimated that approximately 50 per cent of people examined act upon the medical advice given them. The insurance companies are quite willing to turn over these examinations to the private physician because it costs them considerable money. Dr. A. S. Knight, Medical Director of the Metropolitan Life Insurance Company "emphasized the importance of having these examinations made, not so much under life insurance auspices in the future, but rather at the request of the great mass of people themselves and at their own personal expense. The insurance companies have done a proper

service to their policy holders and have demonstrated the value of the physical examination. They will continue to serve to certain extents, limited by their finances, but the future really lies with the people themselves who must be educated to avail themselves of this kind of service and with the doctors who must equip themselves to render it and to popularize it."

Professional activities on a large scale are reported in a few places. North Carolina has pioneered by a state wide campaign, aided financially by the International Health Board of the Rockefeller Foundation. Dr. Laughinghouse, State Health officer, instituted a Health Maintenance Bureau and delegated Dr. F. R. Taylor on a whole time basis to bring periodic health examinations before the doctors and influential laymen in every one of the 100 counties in the State. Everything was done through or with the approval of the local medical profession. Every county had been visited by September of 1929. The plan was first to arrange a talk before the county society as a rule and then if the local profession approved to arrange talks to lay groups, clubs, etc. In the smaller communities, demonstrations were given. Many doctors were examined. Influential laymen were preferred for examination such as newspaper editors, teachers, ministers, parent teacher workers, etc. Hundreds of talks and demonstration clinics were given and articles and editorials written. Dr. Taylor traveled by automobile carrying a field laboratory equipment and a nurse or medical student as an assistant. The campaign was regarded as highly successful.

In New York State, a cooperative movement to emphasize the importance of periodic health examinations has been successfully under way since 1924, through the efforts of the Medical Society of the County of New York and aided financially by several organizations interested in public health and preventive medicine. Their interest is unabated. A recent announcement in the *Journal* of the American Medical Association states that "During November, the five county medical societies of Greater New York will endeavor to popularize periodic health examinations. The Medical Society of the County of New York has enlisted the cooperation of the other medical societies, each of which has appointed a special committee to carry out the prepared program among physicians as well as the public. It will enlist the aid of the radio, theaters, press, schools, charity organizations, public official agencies, religious and social bodies and public utility organizations. The plans involve the expenditure of about $10,000.

In contrast to such enthusiastic compaigns, the great mass of the profession is still rather indifferent. In lay circles, the movement is accepted as sound as stated by the insurance companies and health organizations.

The National Industrial Conference Board stated in its report in 1925 that 255 companies out of 446 investigated examined all applicants for employment and many periodically re-examined. Objections by employes or applicants were practically nil. Industry obviously is carrying out health examinations on a large scale by employed physicians. Evidently they believe it pays. Like the insurance companies, they will do less of it if the private practitioner will do more of it.

THE ATTITUDE OF THE PROFESSION

The phase of the whole situation in which we should be most interested is that the profession should not be found wanting in the eyes of an intelligent laity, especially in these days when medicine is undergoing a kind of social and economic inquisition. One of the most unfortunate attitudes that we are apt to take toward this movement or toward the individual seeking a health examination is that of levity or mild ridicule which very effectively dampens the ardor of any patient and especially that of the desirable type of patient. The neurasthenics we have always had with us, with or without a health examination movement. Turning to levity is a venerable form of evasion in situations which we are not prepared to meet. Upon analysis we will find no justification for scorning any form of effective preventive medicine. No one can deny that a system of periodic health examinations—whatever its disadvantages, or shortcomings—will lead to the discovery of some cases of early tuberculosis, early cancer, early cardiovascular disease, early diabetes, untreated syphilis, much neglected focal infection and bad hygiene. The percentage of important findings in healthy people may seem small which is apt to be uninteresting to the doctor, but to the patient very well worth while. It is the human element that must be appreciated rather than abstract scientific interest. The more advanced the pathology, the more interesting we have been inclined to regard the case even though the patient is ready for the human scrap heap, "floating like a derelict from one physician's office to another" or invalided in some charitable institution. A new view point is necessary—one— as emphasized by Sir James McKenzie which directs our interest to the incipient stage of disease as seen by the family physician or in the functional or preclinical stage discovered in the health examination. Dr. William H. Welch has lamented the small degree to which preventive medicine has been carried over to the people. If the medical profession is to regard itself as the guardian of the public health, then in the last analysis the responsibility for the enormous human wastage from preventable disease must rest upon the medical profession. Glenn Frank, President, of the University of Wisconsin stated to the American College of Surgeons in Chicago, that "the cost of preventable disease and postponable death was $1,800,000,000

a year in the United States," and that "if the profession failed to reduce this loss the government or super insurance companies would". This is certainly "telling the profession" the temper of the intelligent laity on the status of preventive medicine. A large part of the indifference of the profession is of course our traditional conservatism. We forget the lessons of history. We forget that nearly every new movement in medicine has been resisted by many of the regularly constituted authorities. We forget that Harvey, Lister and Holmes were denounced by professors of medicine. We forget even that many of the fathers of the present generation of physicians died ridiculing the idea of "germs causing disease."

The Health examination movement is really the latest phase of preventive medicine to be carried out by the personal cooperation of the public. It is important for us to support this movement whether or not we individually care to do the examinations. Many men in special fields will not care to do them but can readily refer applicants instead of showing indifference or ridicule or otherwise disparaging the idea. Indifference is often interpreted as incompetency.

CLEVELAND PROGRAM

The Periodic Health Examination Committee of the Cleveland Health Council has a very carefully thought-out plan for popularizing the movement in Cleveland in the near future. It will be done entirely under lay auspices but with the approval of the council of the Academy of Medicine. We have in other words virtually the privilege of censoring the methods while the health council actively manages the campaign. They have considered the methods used in other places and are trying to select the best in publicity methods, speakers, posters, slogans, newspaper articles, etc.

When applicants come to us let us be prepared to take them seriously. It will render a real service and at the same time be a legitimate source of income in private practice. If we do not do it privately, it will be done increasingly by salaried examiners in industry, in schools, and organizations of all sorts and it will be quite futile for the profession to protest.

If I have in any degree stimulated renewed interest in the health examination movement or showed the extent to which the laity is interested and the folly of a reactionary attitude on the part of some physicians I think I shall have carried out the purpose of the national and the state committee in advocating at least an annual discussion in every county.

SUMMARY

1. The movement is slowly gaining favor, perhaps more rapidly with the laity than with the profession.

2. Lay agencies should and are beginning to lead in the popularization of the plan with the public.

3. Professional guidance and enthusiastic cooperation are our opportunities.

4. The profession should be duly awake to this new form of medical practice and be prepared to give efficient service when called upon.

5. Indifference or ridicule is especially unfortunate.

6. Some State Medical associations have undertaken state wide campaigns to inform the physicians as to possibilities, methods, etc.

7. Insurance companies, industrial health organizations, schools, railroads, etc., are steadily expanding this type of service by salaried examiners.

8. It will be futile for the profession to protest against such encroachments if they are not prepared to give equally good service privately.

Large Dermoid Cyst Complicating Pregnancy—Removed 15 Days Post Parturient

W. M. JOHNSTON, M.D.*

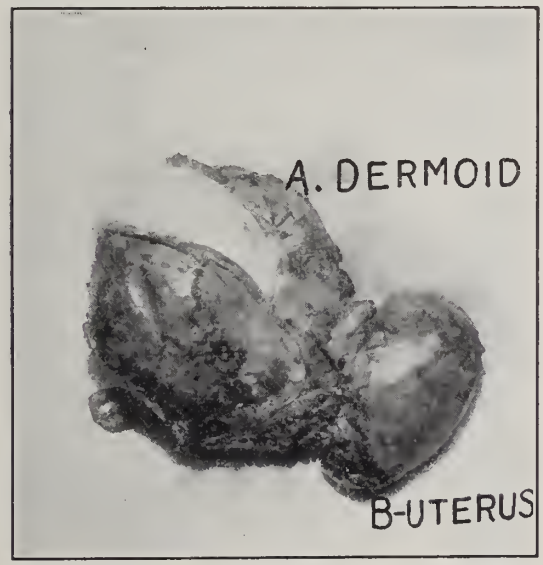
ON July 1, 1929, we had admitted to Maternity Service a colored woman, 24 years old, apparently at full term and in labor. She delivered very rapidly, in fact so soon after admission that a thorough examination could not be made. A former midline operative scar was visible however, and in the center of this incision was a small sinus which drained purulent material. After delivery it was noticed that there was still a large tumor in the abdomen. There were no post parturient complications, patient making a very normal recovery. When her history was taken, she reported an exploratory operation had been done on her August 19, 1927, at another hospital. It was evident that she did not do well under the anesthesia because her abdomen had been closed without removing the tumor. All her laboratory findings in the hospital were negative and her general condition being good, she was placed on the surgical service on the thirteenth day post parturient.

Under spinal anesthesia the abdomen was opened and quite a problem presented itself. There was a large left ovarian cyst eight inches in diameter, with sinus before mentioned opening from this cyst through the abdominal scar. The omentum was adherent over anterior surface of tumor. The bladder was adherent to about one-half anterior diameter of tumor. The omentum was carefully dissected from the cyst and with extreme care the bladder was dissected away from the tumor. It was then found that the tumor was so adherent to the fundus of the uterus that an attempt to separate them would have been

*Chief Resident Surgeon, Akron City Hospital.



futile; therefore, a supracervical hysterectomy was done, removing the large cyst and the left tube with the uterus. An incidental appendectomy was also done; all of this being done under spinal anesthesia which worked perfectly.



The pathological report of specimen:—"Consists of a uterus of about five inches in diameter, rather soft. Attached to the anterior surface is a cyst about eight inches in diameter with a piece of skin adherent which contained the opening of a fistulous tract connecting with the cyst. The cyst contains a quantity of milky fluid with some large lumps of sebaceous material and some dark hair. The interior surface of the cyst is smooth and no head prominence can be seen." Diagnosis: Puerperal uterus with adherent dermoid cyst showing fistulas connection with external skin.

The accompanying cut shows the specimen which was removed at operation.

This patient's post operative recovery was uneventful. Patient left the hospital on twentieth post-operative day in excellent condition. Her health has been very good up to the present time.

Medical Cooperation With The French Profession

France is exceedingly anxious to play host to American physicians seeking post-graduate instruction in European centers of learning and in foreign clinics and colleges.

A nation-wide movement in France to induce American medical students to visit Paris for their work has been started as a part of a campaign to have Americans and Frenchmen become better acquainted and each gain a better understanding of the other.

Deploring the present lack of understanding, Albert Milhaud, writing in the *L'Ere Nouvelle* (Paris) makes the following comments, according to *The Literary Digest*:

"All the realists—and especially the realizers —who deplore this state of things are looking for remedies. We are not surprised that the medical fraternity has some to offer.

"For my part, I think that their first suggestion is good, though doubtless insufficient.

"It is to invite and retain in contact with our medical profession in Paris American physicians who are now flocking in great numbers to complete their medical education in the capital where preparations have been made to receive them— Berlin, Vienna, Rome, Prague, Budapest.

"Paris views all this not without emotion, and now just as the courses of higher education are being resumed, a piece of good news comes to us —eminent professors of the Faculty of Medicine are giving instruction in the English language, especially designed for students who speak that tongue. I congratulate those who are offering these courses."

Mr. Milhaud then quotes a letter from a Canadian physician, the *Digest* says, which said in part:

" 'Paris must do as much as Vienna for English-speaking physicians if the French wish to extend to the United States the benefits of the science of Pasteur and his successors. I believe that a great hospital in Paris should be attended by English-speaking students, physicians or not, and that physicians, surgeons, specialists, laboratory workers, and all working scientists should talk English in order to facilitate the work of these foreign students. This is only what is done in Vienna. It is good politics, and I hope that the Paris Faculty of Medicine will adopt it, for thus, in one stroke, it will have found the means of reaching the brains of American physicians. Now the distance from the brain to the heart is easily spanned. If you could read the letters that I have received from American physicians, you would see how anxious they are to go to Paris for study, and you would understand that the language difficulty alone has hitherto prevented.' "

Mr. Milhaud concludes his article with these observations:

"Unable to do things, do they say? Here, at least, is one thing for us to do.

"Is this the only thing? Certainly not; it is but the first step. Others will follow. These American professors who come to stay in Paris to take medical courses in English, and to work in our hospitals side by side with English-speaking teachers and students, will become the friends of teachers and fellow pupils. They will learn to know the French and France. And when they go home, they will describe to their fellow countrymen, not the Paris of the tourists and their rather singular explorations, but that of work-a-day France. What a wonderful battle our medical faculty is getting ready to fight! A fine weapon of national politics is ready for our hands."

Maternity and Infancy Measures Are Again Being Advocated

New schemes to promote maternity and infancy hygiene throughout the nation at the expense of the Federal government have put in their appearance.

Legislation similar to that which has served as a political and paternalistic football for the past six or seven years has been hatched and will soon be booted hither and yon across the gridirons of Congress.

Ever since their failure to obtain another extension of the Sheppard-Towner Act, which expired last June 30, those who favor expansion of federal bureaucracy in the field of public health have been attempting to force through Congress legislation similar to the Sheppard-Towner Law.

Former Congressman Walter Newton of Minnesota, before he left Congress to become a third secretary to President Hoover, fathered several measures in the legislative assembly which were more objectionable than the original maternity and infancy law. Fortunately, his measures met a slow death in the hectic session of the last Congress.

Now the crusading mantle shed by Newton seems to have fallen upon the shoulders of Wesley L. Jones of Washington and Congressman John G. Cooper of Youngstown, Ohio. They have introduced twin measures practically reenacting the Sheppard-Towner Law, save that the time limit is removed and the law would acquire permanency, making it even more objectionable than the law which expired in June.

The questionable value of such legislation is well known to Ohio physicians and no attempt should be necessary at this time to summarize the fallacies of paternalistic and bureaucratic measures of this kind.

However, it is important that every physician should bear in mind that Sheppard-Townerism, dolled up in a brand new uniform, is still very much alive.

Proponents of the new maternity and infancy measure are organizing and their propaganda is rapidly gaining circulation. This is evidenced by an article published in a recent issue of a magazine issued by a women's political organization of Ohio, which calls attention to the campaign being planned and the personal interviews which already have been held with Ohio Congressmen.

Sheppard-Townerism is still very much alive and challenges those who are familiar with the angles of such paternalistic and bureaucratic projects.

Medical Side-Lights During Civil War Are Recalled

An interesting sidelight on the medical history of Ohio was published recently in the "Short Stories of Ohio" column of the *Columbus Dispatch*.

The article, entitled "Ohio Surgeons in the Civil War," said:

"When Governor Dennison, the first Ohio Civil war governor, was confronted with the task of organizing the volunteer regiments of the state for that service, the problem of securing able surgeons for the regiments had to be solved and he appointed a board of examiners consisting of Dr. J. W. Hamilton of Columbus, Dr. George C. Blackman of Cincinnati and Dr. L. M. Whiting of Canton to pass upon the qualifications of all candidates for appointment as surgeons or assistants.

"The board adopted a rule that to be considered, an applicant must be a graduate of a regular school of medicine and surgery, and to have had at least 10 years' active practice to be a surgeon, and five years to be an assistant surgeon. They must also be able to stand a strict examination at the hands of the board.

"Drs. Blackman and Whiting found it inconvenient to come to Columbus as frequently as the work required, and resigned in the summer of 1861, and their places on the board were taken by Drs. S. M. Smith and William M. Awl of Columbus. The board stood so composed through the administration of Governor Dennison.

"Governor Tod appointed as his army medical board Drs. C. C. Cook of Youngstown, J. W. Russell of Mt. Vernon and John A. Murphy of Cincinnati. Dr. Cook died shortly after his appointment and his place was taken by Dr. G. C. E. Weber of Cleveland. But in the absence of Dr. Weber and the ilness of Dr. Murphy, Drs. Starling Loving and S. M. Smith served by special arrangement.

"Later a state surgeon general on the staff of the governor was appointed, who in a measure took over the duties of the board, and the selection of Governor Brough for this office. Dr. R. N. Barr, professor of anatomy in the Medical College of Cleveland, assumed entire control of the determination of the qualifications of candidates for appointment to the volunteer army service.

"Under these various arrangements 287 surgeons and 694 assistant surgeons were selected in Ohio. That mistakes were made is strongly indicated by the fact that 122 surgeons and 171 assistant surgeons tendered their resignations. Forty-two doctors in this service died in the service, some on battle fields, but more of disease contracted in hospitals where their principal service was rendered."

The President's Page

A Personal Communication to the Membership from

ALBERT H. FREIBERG, M.D., Cincinnati

As these words are being written, one may already sense the dawn of a new year. This is apt to put one in a reflective mood. One is likely to remember that January received its name because, in the days of Rome, this month was committed to the care of the two-faced god Janus, who had the ability to look backward and forward at the same time. In the spirit of analytic reflection it is possible to look backward to any extent and what one sees will depend chiefly upon the degree to which he has acquired a true sense of perspective, as he gazes down the hall of Time. How different it is with the effort to look ahead. What *will* happen is in the "lap of the gods"; what *may* happen depends, however, very largely upon what has happened. With regard to the profession of medicine, so much change has taken place within a comparatively few years and Society itself has become transformed to such degree that the temptation is strong to try an interpretation in terms of the years to come. However, prophesying has ever been accounted a dubious undertaking and, by many, a sheer waste of time. Nevertheless, forward looking men are those upon whom progress depends and our attitude toward the future must needs be built upon a survey of what has gone before. Haverlock Ellis has said: "We cannot remain consistent with the world save by growing inconsistent with our past selves".

For years it has been proclaimed by the medical profession that the prevention of disease was a fundamental purpose toward which it was striving. This statement, equivalent to saying that the doctor was making the effort to render his work unnecessary, was met with a sneer from certain quarters. Preventive medicine and sanitation, in its modern sense, could, however, be spoken of only when science had disclosed the true causes of disease. Preventive medicine really began with the discovery of Jenner; with what was after all an empirical observation, since the causative agent of smallpox is not, even yet, definitely known. The development of bacteriology in the latter half of the nineteenth century and the knowledge of the processes of immunity, thereupon consequent, had as their result the evolution of that preventive medicine and sanitation which we know today and whose triumphs have been accepted as among the most precious possessions of our modern society. It is not necessary to enumerate what has been accomplished in this field. It is enough to say that such great advances have been made in preventive medicine through scientific discoveries, during the past twenty-five years that the most optimistic attitude toward the future promises in this field would appear to be justified. The incidence of typhoid fever, malaria, yellow fever, diphtheria, smallpox and other acute infectious diseases has been utterly changed thereby. The effect upon the health of civilized communities has been so evident that the prevention of disease has become a prime function of the modern social worker and he has become interested to the extent that we find the accusation made against the medical man that his activity in the prevention of disease has lagged behind the accomplishments of his own profession. The moment that a truly scientific demonstration of the possibility of preventing a disease is made, it becomes the possession of the community. It is no longer difficult to make the public realize the possibility of such prevention. To the extent that such recognition has been achieved medicine has become "socialized." We therefore have seen a group arise from our ranks whose lives are devoted to Public Health and Hygiene. These men have become the servants of the community; they represent that part of our profession who apply themselves to medicine as it has been socialized.

In 1849, Rudolph Virchow, scientist and statesman, wrote:

"Should medicine ever fulfill its great ends, it must enter into the larger political and social life of our time; it must indicate the barriers which obstruct the normal completion of the life-cycle and remove them. Should this ever come to pass, medicine, whatever it may then be, will become the common good of all. It will cease to be medicine and will be absorbed into that general simplified body of knowledge which is identifiable with power. When we have exact knowledge of the conditions of existence of individuals and peoples, then only will it be possible for the laws of medicine and philosophy to gain the credence of general laws of humanity. Then only, will the Baconian 'Knowledge is Power' become accomplished fact." (Translation by Garrison).

Enough has been accomplished since Virchow wrote these words to make them seem prophetic. A review of what has been done might be expected to arouse an enthusiasm anticipating the imminence of the health millennium. However, calm reflection will soon disclose the fact that we are very far from such a desirable state; it will become evident that the improvement in the incidence of morbidity lies almost entirely within the domain of the acute infections. We shall realize that the conditions of modern life have in the meanwhile brought new problems to us, of great magnitude and significance. Degenerative diseases, especially of the cardio-vascular system,

cancer, metabolic diseases and the traumatisms incident to modern transportation methods and industry; these are on the increase. These are conditions which do not lend themselves to attack upon the people as a mass; they are problems of the individual and they call for the study of the individual. When one thinks of the problems which are brought before us by a consideration of these disease conditions and injuries there seems to be no present likelihood of disappearance of the need of the individual for a personal physician. One can but wonder what problems the life of the future will bring and one may well ponder the words of Anatole France:

"The future is hidden even from those who make it."

No one who has been in the active practice of medicine during the past twenty-five years can fail to have noticed the significant changes which have taken place with regard to it in this period. I think that it may not be said that the economic position of the doctor has suffered deterioration within this time. The character of the work which he does for his patients has, however, changed noticeably. This may be ascribed to a number of causes, chief among which are the altered incidence of the acute infections before referred to, his different relationship to industrial accidents as influenced by legislation in this field and the greatly increased recourse to the hospitals for diagnostic and therapeutic purposes. If the control of acute infectious disease has become a social problem because it involves the body politic as a whole, the prevention and control of the other diseases as tasks relating to the members of society as individuals may be said to have become definitely emphasized thereby. These tasks remain and are likely to continue to remain for the particular activity of the physician in behalf of the individual client; they pertain to him as an individual because their basis lies in his personal heredity, occupation and his manner of living, just as their control lies in these same factors to the degree that effectual control may be spoken of, as possible, at the present time. We are here dealing with the study of the temperament and constitution of individual persons and the effect of such study upon the prevention of such health shortcomings as may thereby be foreseen and forestalled. We are, or should be, next concerned with the detection of disease in its very earliest stages; at a time when advice concerning the appropriate measures may be expected to result in maintaining useful activity and prolonging life. It is in the hope of accomplishing such results that periodical health examinations have been advocated as a major activity for the practising physician. Evidence is already at hand to show the value of such periodical check-up of the individual. The great insurance organizations are not likely to be found in enthusiastic advocacy of such procedures without being in possession of good reason therefor. May we not with justice look to such functions of the doctor as indicating what his future relation to society is to be? I think so, beyond reasonable doubt.

Although the attempt to arouse a general interest on the part of the medical profession in periodical health examinations, of such clients as consider themselves well, has been going on for more than five years, it cannot be said to have met with a very enthusiastic response up to the present time. This fact has been ascribed to the demand made upon the time and thought of the doctor by those who are acutely ill or by those whose life activity has already become compromised to a greater or less degree. The making of a truly useful examination of this kind bespeaks the mastery of a technique and routine, however, which was not comprised in the original training of a very large portion of those who are now in active practice. It is apparent, that in order to be reliable, such examinations must be exactingly thorough, skillfully performed and assisted by the use of modern means of precision. It is highly likely that in order to do this work in an acceptable manner a considerable proportion of our colleagues will require additional training. Many more of them, however, require simply to assign to this matter a sufficient importance and a place in their studies and to constitute themselves persistent advocates to those who come within their sphere of influence. It seems but logical to think of periodical examination of the apparently well as looming large in the scheme of medical practice of the future.

We shall, of course, not overlook the fact that we still have very much to learn; that the most painstaking and skillful examination may fail to disclose the basis for certain health disasters which may later befall. We are all familiar with instances in which sudden death has overtaken persons who had been found healthy in careful examinations undertaken but a short time before. We are no less aware of cases in which predictions made upon the findings of such examinations have failed to materialize. We may not, therefore, ascribe to such examinations a value which is greater or more definite than the present state of knowledge and the fallibility of human judgment justify. Neither shall we fail to realize that certain dangers threaten the good reputation of this kind of endeavor for the preservation of health; that the examinations will sometimes be made by those not truly qualified, that they will sometimes be done without requisite care and thoroughness. These are human failings. We shall not be unmindful of the likelihood that it will sometimes happen that advice will be given as the result of such examinations which will cause totally unnecessary mental distress or even physical damage. These are contingencies which arise among men even in their management of inanimate materials, whose physical

properties are capable of exact measurement and appraisement; they occur in the construction of bridges and other structural undertakings. How much more like are such shortcomings to be with regard to the human machine? And yet, notwithstanding the consideration of these probabilities, our duty in advocating the performance of periodical examinations of the apparently well seems truly ineluctable.

Should what has here been written have stirred an interest on the part of some who have hitherto remained indifferent to the matter of periodical health examinations, a good purpose will have been served. And should such be in search of information and guidance, they may be referred, first of all, to the report of the Committee on Periodic Health Examinations of our own Association; it may be found in the *Ohio State Medical Journal* for May, 1929. The American Medical Association, in 1925, published a manual for the conduct of such examinations which will serve as an excellent guide and which may be easily obtained. It is more than likely that there is a place for a handbook, or manual, still more condensed and whose purpose would be to assist those inexperienced in this work in its actual performance. In any case it seems safe to say this much: that the plan of periodical examination of those apparently well has commended itself to those who have studied it, both within and without the profession; that no general practitioner can fail to consider it seriously without having to feel that he has been indifferent to a matter of importance, both to his patients and himself.

The advent of the New Year gives to your President the opportunity to express to all of the membership of the Association his hearty good wishes for their happiness and well-being; for this year and those to come after it. May happiness come to them out of their labors and may their work redound to the ever increasing credit of the profession. Rightfully followed, it is a profession which is surpassed by no human calling in nobility of purpose and by none in its possibilities for good to mankind. May the year 1930 see it exalted ever more in the esteem of those whom it strives to serve and may its endeavors in their behalf be rewarded by success.

TO ALL, A HAPPY NEW YEAR!

Association Activities, Numerous Questions and Policies Considered at December Council Meeting

COUNCIL MINUTES

The Council of the Ohio State Medical Association met in the headquarters office, Columbus, at 1:00 P. M., on Sunday, December 15, 1929.

The officers and councilors present were: Drs. Freiberg, Waggoner, Platter, Caldwell, Houser, Klotz, Slosser, Cummer, Stevenson, Brush, Seiler, Goodman, Stone; Dr. Upham, Chairman of the Policy Committee; Dr. Davidson, a member of the Policy Committee; Dr. Bigelow, former President; Dr. Mattox, Marion; and Executive Secretary Martin and Assistant Executive Secretary Nelson.

The minutes of the Council meeting held in Columbus on Sunday, October 6, 1929, (published on pages 891 to 893 of the November, 1929, issue of *The Journal*) were read, and on motion by Dr. Houser, seconded by Dr. Slosser and carried, were approved.

RESOLUTION ON THE DEATH OF DR. KING

The President, Dr. Freiberg, submitted to the Council the following resolution on the death of Dr. J. M. King, of Wellsville, Councilor from the Seventh District:

The Council of the Ohio State Medical Association is inexpressibly saddened by the demise of its colleague, Dr. Jennings M. King. During the years of his service as one of their number, his faithful attendance, his cheerful and friendly demeanor, his unremitting zeal in the performance of his duty have ever characterized him as of the noblest of the medical profession. Skilled in his profession, beloved in his community, he has been repeatedly singled out by his fellow citizens and colleagues for service in their behalf, because they knew that their trust was well placed and his career has amply justified the notable distinction which came to him.

Be it therefore resolved, that the Council of the Ohio State Medical Association express, in this manner, their sincere grief at the loss of this beloved colleague and that they extend to his bereaved family their sympathy and this token of their admiration of his career as an ideal physician.

Be it further resolved, that this resolution be spread upon the minutes of the Council and a copy thereof be transmitted to the family of Dr. Jennings M. King, whom they shall ever hold dear in memory.

By silent rising assent, the foregoing resolution was adopted.

1930 ANNUAL MEETING PLANS

Dr. Goodman, the Chairman of the Council Committee on Arrangements, reported on the local plans, meeting places, exhibits, etc., for the Annual Meeting of the State Association scheduled to be held in Columbus, on Tuesday, Wednesday and Thursday, May 13, 14 and 15, 1930. Dr. Waggoner, Chairman, and Dr. Goodman, Secretary of the Program Committee, reported on the progress of the program to date. The question of clinics in connection with the Annual Meeting was discussed, and on motion by Dr. Klotz, seconded by Dr. Stevenson and carried, the Council expressed a sentiment in favor of clinics and recommended to the local committees on arrangements of the Columbus Academy of Medicine,

that clinics be held. details to be left entirely in the hands of the local committees.

REPORT OF OHIO WELFARE CONFERENCE

Based on the action of the Council at its meeting on October 6, 1929, at which time Dr. D. C. Houser, Councilor of the Second Councilor District, had been designated as the official delegate of the Ohio State Medical Association to the annual Ohio Welfare Conference held in Dayton, October 8, 9, 10 and 11, 1929, Dr. Houser submitted a detailed written report. Upon motion by Dr. Caldwell, seconded by Dr. Stone and carried, the Council expressed appreciation to Dr. Houser for his comprehensive and interesting observations, received the report, and ordered it placed on file.

PRESENTATION OF PAST-PRESIDENT GAVELS

The President introduced Dr. Upham and requested him to officiate at a ceremony scheduled at this time. In gracious and appropriate words, Dr. Upham presented to Dr. C. W. Stone, Cleveland, and Dr. L. L. Bigelow, Columbus, recent Presidents, Past-President Gavels, appropriately engraved, as symbols of honor and authority and as tangible reminders to them of their close and lasting interest in the affairs of medical organization. Dr. Bigelow and Dr. Stone responded, expressing appreciation and their continuous, permanent interest and activity in the affairs of the Ohio State Medical Association.

CONFERENCE ON SOCIALIZED MEDICINE

The President reported to the Council on a conference held at the headquarters of the State Association on Sunday, December 8, attended by the members of the Medical Economics Committee, and the additional special members, to consider questions of socialized medicine as contemplated under the resolution introduced by Dr. E. M. Huston, Dayton, adopted by the House of Delegates at the last Annual Meeting. Dr. Freiberg reported on the discussion at that meeting and on the review of what had been done in the past by committees of the State Association, the Council, and the House of Delegates, on questions of state medicine and socialized medicine.

THE FOUNDATION FUND QUESTION

The President called the attention of the Council to the pending question of the Foundation Fund. He referred to the holdover House of Delegates Reference Committee report which had been placed in the hands of the councilors prior to the last meeting on October 6, and to the report by the Foundation Fund Committee submitted at the October 6 meeting, copies of which had been transmitted to the councilors on October 9. The history and developments on the Foundation Fund question, as summarized in detail in the docket for the October 6, meeting, was referred to by Dr. Freiberg. Reference was also made to the action by the House of Delegates at the last Annual Meeting (page 478 of the June, 1929, issue of *The Journal*) in which this entire question was referred by the House of Delegates to the Council for consideration and action.

Questions in relation to the development of the Foundation Fund idea and to the reports of the committees on the matter were discussed by Drs. Slosser, Stone, Goodman, Brush, Houser and Seiler.

Dr. Houser moved that the matter be further considered at the next meeting of the Council, and that Dr. Bowers, Chairman of the Foundation Fund Committee, and Dr. Jones, Chairman of the Holdover Reference Committee from the House of Delegates, be requested to be present, to present additional ideas. The motion was seconded by Dr. Caldwell, and on being put to a vote, was lost, there being five ayes, and six nays.

Dr. Cummer then moved that the plan and procedure of the Foundation Fund Committee, as contained in detail in the blue pamphlet which was submitted to the House of Delegates at the 1928 Annual Meeting of the State Association, be approved and that the Foundation Fund Committee be authorized to proceed. This motion was seconded by Dr. Slosser, and on being put to a vote, was lost, the vote being four ayes, and seven nays.

Dr. Seiler then moved that the Council transmit to the House of Delegates at the next Annual Meeting, its opinion that the Foundation Fund proposal for the State Association is not practical or desirable. On being put to a vote, this motion was carried, there being seven ayes, and three nays.

QUESTIONS OF PHARMACY

Dr. Upham, chairman of the Policy Committee, submitted to the Council a detailed report recommending policies and procedure based on several meetings, including joint conferences with a special committee of the Ohio State Pharmaceutical Association, relative to closer cooperation, a consideration of problems of mutual interest, and proposals on the advancement of pharmacy.

On motion by Dr. Stevenson, seconded by Dr. Seiler and carried, the report of the Policy Committee was endorsed and the committee was authorized to proceed as suggested and recommended by Dr. Upham.

The question of delegates from the Ohio State Medical Association to the 11th Decennial Pharmacopoeial Convention to be held in Washington, D. C., May 13, 1930, was brought up for consideration, this matter having been deferred from the last meeting of Council. Dr. Upham pointed out that each of the three Class A medical colleges in Ohio would undoubtedly send an official representative to the Pharmacopoeial Convention. He stated that perhaps there would be some advantage in also authorizing those delegates as the delegates from the Ohio State Medical Association, and suggested a slight honorarium to

them to apply on their expenses. On motion by Dr. Goodman, seconded by Dr. Seiler and carried, final decision in this matter was left in the hands of the Policy Committee with power to act, and an amount of money authorized to be spent for purposes outlined by Dr. Upham, not to exceed $100.00, to be appropriated from the general funds of the State Association.

MARION COUNTY CONSTITUTION QUESTION

There was submitted to the Council a formal communication from Dr. S. W. Mattox, President of the new Marion Academy of Medicine (the Marion County Medical Society) requesting the issuance of a charter. Attention was called by the President to previous Council action on this matter and the Council's interpretation of that action—(minutes of April 30, 1928, June, 1928 *Journal*, page 422; October 7, 1928, November, 1928 *Journal*, page 884; January 6, 1929, February, 1929 *Journal*, page 126; March 3, 1929, April, 1929 *Journal*, page 297; May 6, 1929, June, 1929 *Journal*, page 482).

Dr. Freiberg, the President, submitted for the consideration of the Council the following resolution:

Resolved that a Charter be reissued to the Marion County Medical Society under the new title of the Marion Academy of Medicine and subject to the following provisions, to-wit:

1. The reissued Charter shall be placed in the hands of Councilor, Dr. O. P. Klotz, when it has been properly executed.
2. Councilor Klotz shall be empowered to deliver the instrument to the Marion Academy of Medicine only after he has satisfied himself that its roster coutains the name of every member of the Ohio State Medical Association from Marion County so recorded in its office on this day.
3. The *voluntary* withdrawal of any member from the roster of the Marion Academy of Medicine shall not invalidate the provisions of this resolution.
4. Upon the delivery of the reissued charter to the Marion Academy of Medicine, any preexisting Charter of the Marion County Medical Society is hereby declared abrogated and of no effect.

Upon motion by Dr. Goodman, seconded by Dr. Caldwell and carried, the above resolution was approved and adopted, including the authorization therein contained.

Dr. Mattox expressed to the President and the Council, appreciation for its action on this matter and pledged adherence to the terms of the resolution.

WORKMEN'S COMPENSATION QUESTIONS

The President submitted for the information of Council the proceedings of the Medical Economics Committee meeting on December 8, pertaining to questions of workmen's compensation administration and compensable occupational diseases. The Secretary of Council read the minutes of the committee meeting of that date. The President further pointed out the importance of the questions under consideration by the Medical Economics Committee and expressed appreciation for their earnest efforts. Council requested the committee to continue its deliberations on these matters.

QUESTION OF LADIES' AUXILIARY

The President submitted to the Council communications and resolutions from Stark County requested the recognition by the State Association, and the issuance of a charter to a Woman's Auxiliary. The President called upon Dr. Upham to discuss this matter. Dr. Upham suggested that if sufficient county medical societies desired a Woman's Auxiliary in their respective communities, that they might submit to the Council and the House of Delegates, the question of charters.

Following further discussion on this question, on motion by Dr. Goodman, seconded by Dr. Slosser and carried, the Council expressed itself as follows:

In view the tendency toward over-organization, we do not favor the creation of further associations—that we feel so sure of the spirit of cooperation among doctors' families, that we consider an official auxiliary unnecessary.

PROGRESS ON NEW CONSTITUTION

Dr. Freiberg reported on a series of meetings held by the committee on Revision of the Constitution, as authorized by the House of Delegates at the last Annual Meeting. He discussed some of the provisions on which the committee expected to recommend amendments, and stated that the report of the committee would be completed in time for publication in the March issue of *The* Journal, as required by the constitutional provision on proposed amendments.

ELECTION OF DR. KING'S SUCCESSOR

Under the requirements of Chapter VII, Section 7, of the By-Laws, whereby the Council "shall, by appointment, fill any vacancy in the office occurring in an interval between the annual sessions of the House of Delegates", the Council took up the matter of selection of a successor to Dr. King, deceased, as Councilor from the Seventh District. Several names were suggested and placed in nomination. The final vote resulted in the selection of Dr. E. B. Shanley, of New Philadelphia, as Councilor from the Seventh District to serve the unexpired term of Dr. King, to the time of the next Annual Meeting in May, 1930.

BUDGET FOR 1930

The Council went into executive session at this point and the Auditing and Appropriations Committee, through Dr. Goodman, Chairman, submitted the following report and recommendations for the proposed budget for the Ohio State Medical Association for the calendar and fiscal year of 1930.

REPORT AND RECOMMENDATIONS OF THE COMMITTEE ON AUDITING AND APPROPRIATIONS

In conformity to the duties imposed by the

Constitution and By-Laws on the Auditing and Appropriations Committee, this committee presents herewith to the Council for consideration, modification and official adoption, the tentative proposed budget for the calendar and fiscal year of 1930, of the Ohio State Medical Association. In formulating this budget and in its presentation to the Council, this committee desires to point out that all disbursements for the current fiscal year of 1929 have been kept within the authorized budget allowance for this year, that all funds over and above those required for current expenses were placed upon time deposit from which source the Association benefited by accrued interest; and that every precaution and safeguard was observed in protecting funds received, funds expended and funds placed at interest on certificates of deposit.

The Auditing and Appropriations Committee respectfully calls the attention of the Council to the fact that a substantial accrued unexpended balance has been accumulated in the general funds of the State Association.

It has been the effort of this committee not only to see that all expenditures were within the official authorization by the Council, but that they were effectively and judiciously expended for the benefit of the membership. In spite of gradually increased costs, including printing and supplies and other necessities, and in spite of increased activities by Association committees and our executive headquarters, requiring increased expenditures, the general funds of the Association as a balance at the end of the present year, are increased as explained above.

It is the earnest opinion of this committee that under the funds available, the income derived, and the amount expended, that medical organization in this state has accomplished more and been of greater service to its membership, on nominal dues, than any similar organization anywhere. It is our belief that the per capita dues of the State Association of $5.00 per year, should be increased before long in order to provide for expansion, development and additional activities to meet constantly expanding problems confronting medical practice in relation to government and society.

At the close of the fiscal year, this committee employs a certified public accountant to audit the records of all financial transactions of the Association. The result of this audit, as represented by the report submitted by the accountant, constitutes a part of the annual report of this committee.

The fiscal and financial affairs of the Association have been carefully and promptly attended to by this committee. All the routine and mechanical bookkeeping devices necessary for the accurate and efficient maintenance of records, have been utilized. Each transaction involving the funds of the Association is subjected to the scrutiny and final approval of this committee. Every safeguard is taken not only to preserve and conserve the surplus funds, but to secure interest on all inactive monies until they are needed.

All bills are carefully examined and approved before vouchers are issued for payment. Receipts receive the same careful consideration.

The accompanying proposed budget for 1930 is based upon activities and benefits authorized by the Constitution and through action of the House of Delegates. The budget, as recommended, is almost identical with that authorized and utilized during 1929, a comparative list of which is shown in parallel columns:

Account	Recommended 1930 Appr'n	1929 Appr'n
Ohio State Medical Journal	$10,000	$10,000
Medical Defense	5,000	5,000
Committee on Public Policy	1,500	1,500
Executive Secretary, Salary	6,600	6,600
Executive Secretary, Expense	1,000	1,000
Ass't Exec. Sec'y. Salary	3,700	3,500
Ass't Exec. Sec'y. Expense	300	300
President, Expense	300	300
Treasurer, Salary	300	300
Council, Expense	800	800
Annual Meeting	500	500
Auditing and Appr'n	200	200
Misc. Committee Expense	700	700
Stationery and Supplies	800	800
Postage and Telegraph	800	800
General Counsel	1,800	1,500

Auditing and Appropriations Committee.
S. J. GOODMAN, M.D., Chairman, Columbus,
JOHN A. CALDWELL, M.D., Cincinnati.
C. W. WAGGONER, M.D., Ex-officio, Toledo.

On motion by Dr. Goodman, seconded by Dr. Slosser and carried, the Council adopted the foregoing report and approved and authorized the budget as recommended, to govern expenditures of the State Association for the calendar and fiscal year of 1930.

THE HEART COMMITTEE QUESTION

Dr. Freiberg, the President, presented to the Council for consideration, a letter under date of November 12, 1929, addressed to him, as President, from Dr. Alfred Friedlander, in which the approval of the Council of the State Association was requested on the plans and purposes of the Heart Committee, of which he is chairman, and the program of the Ohio Public Health Association.

The communication, and the various questions involved, were discussed by several members of Council, who expressed opposition to a general extension of specialized clinics organized ostensibly for educational purposes, as being unnecessary and confusing in the public mind. It was pointed out that the medical profesison and medical organization is and always has been earnestly interested in the promotion of public health along practical and constructive lines, but that some of the specialized modern activities in the field of public health have tended to confuse, rather than inform the public. It was also pointed out that over-specialization is unwisely emphasized in some of the special types of clinics, creating lack of confidence in the local practicing physicians, who, as a group, constitute the proper and adequate agencies for medical service and public education.

Opposition was also expressed to the multiplication of organizations and committees. Reference was made to previous discussions and action by the Council on this question. Reference was made to the minutes of the Council meeting of March 6, 1927, published on page 316 of the April, 1927 issue of *The Journal;* the Council meeting of May 9, 1927, published on page 495 of

the June, 1927 issue of *The Journal;* and the Council meeting of July 1, 1928, page 636 of the August, 1928 issue of *The Journal*, pertaining to the National Society for the Control of Heart Disease, and expressing opposition to the multiplication of specialized movements, and expressing the belief that emphasis should be placed on preventive medicine and the detection of early signs and symptoms through a conservative but constructive program of education on periodic health examinations.

It was further pointed out that specialized public health clinics in some communities had created a lack of confidence in the local profession, had created mis-information, had called attention to a few specialists, to the detriment of other practitioners equally well qualified, had increased self-diagnosis and self-prescribing, had destroyed cooperation between various agencies in the public health field, and had encouraged persons amply able to pay for medical service, to expect free service.

The development of the clinic idea in various communities and in other states was also discussed by several members of Council who opposed approval of the request submitted by Dr. Friedlander, and also pointed out the indefiniteness of the plans and budget submitted for the Heart Committee of the Ohio Public Health Association. It was also pointed out that approval of general and vague terms and plans could be interpreted as approval of activities later undertaken, which might be contrary to fundamental policies expressed by medical organization.

Dr. Waggoner moved that the Council reiterate the policies previously expressed by the Council and the House of Delegates, and that approval not be granted by the Council, pertaining to the Heart Committee program and budget of the Ohio Public Health Association as requested in Dr. Friedlander's letter. His motion was seconded by Dr. Seiler. Others who supported the motion in the discussion included Dr. Stone, Dr. Houser, Dr. Cummer, Dr. Klotz, Dr. Slosser and Dr. Goodman.

Several members of the Council, including Drs. Houser, Slosser, Stevenson, Brush, Seiler and Goodman, left during the discussion and before the pending motion was put to a vote. Dr. Freiberg, the President, ruled that a quorum was not now present and the motion was not put. The President expressed the opinion that since no final conclusion had been reached that the entire question should be placed on the docket for the next Council meeting.

MEMBERSHIP DATA

A membership tabulation was submitted to the Council, indicating a total membership in the State Association for 1929 of 5528, compared with a total of 5438 at the end of the calendar year 1928. The data submitted also indicated that on December 14, 1929, the dues for 1211 had been already paid in advance for 1930. The Council requested that the secretary-treasurers of the county societies make a special effort to collect and transmit the dues for as many members as possible for 1930 in advance of January 1, in order that continuous good standing might be maintained in medical organization.

The Council decided to hold its next meeting on Sunday, March 2, 1930, or at an earlier date upon the call of the President.

The Council adjourned at this point in honor to Dr. King, Councilor from the Seventh District, who had died just one week previous to this date.

S. J. GOODMAN, M.D.,
Secretary of Council.

Tenth Annual Conference of Ohio Health Commissioners Marked by Interesting Program, Discussions and Reports on Many Health Problems

Approximately 160 health commissioners and public health nurses attended the Tenth Annual Conference of Ohio Health Commissioners with the State Department of Health and the Fifth Annual Meeting of the Ohio Society of Sanitarians, held jointly at the Neil House, Columbus, November 19-22 inclusive.

A well-balanced and interesting program, including discussions of many problems in public health administration as well as several instructive scientific studies of some of the newer menaces to public health generally, was presented during the four-days conference.

At the business session of the Ohio Society of Sanitarians, the following officers for the ensuing year were elected:

President, Dr. E. R. Hiatt, Miami County; first vice president, Dr. J. J. Sutter, Allen County; second vice president, Miss Ruth Paddock, Lorain County; secretary-treasurer, Dr. E. R. Shafer, State Department of Health, Columbus.

The following were named to the executive committee, Dr. M. D. Ailes, Summit County, and H. L. Spray, Mahoning County, northeast district; Dr. F. R. Dew, Belmont County, and Miss Leah Jennings, Coshocton County, southeast district; Dr. H. J. Powell and Miss Martha Laffey, Wood County, northwest district; Dr. N. C. Dysart, Columbus, and Miss Olive Sinkey, Union County, central district; Dr. W. H. Peters, Cincinnati, and J. V. Jones, Hamilton County, southwest district.

During the business sessions discussions of ways and means to better public health administration were held and all health commissioners urged to cooperate with the state department in its attempt to standardize monthly and yearly reports, and to use the appraisal form in recording the work of their districts.

Following a report of a special committee consisting of J. E. Bauman, Dr. E. R. Hayhurst and Dr. E. R. Shafer, amendments to the Constitution and By-Laws of the Ohio Society of Sanitarians were adopted. Chief among the amendments was one providing for the division of the society into five component geographical units, known as districts, each of which shall be represented on the executive committee by two members, one of whom shall be a health commissioner. Another amendment provides for the election at each annual meeting of a delegate and alternate to represent the society on the governing council of the American Public Health Association. Dr. H. L. Rockwood, health commissioner of Cleveland, was elected as official A. P. H. A. delegate for 1930.

A committee report urging all teacher training institutions in Ohio to give special instruction in school health work was adopted by the society. Chief among the recommendations of the committee were:

(1) Methods of teaching health are matters for educators. Content and relative importance of items should be matters for indorsement and approval of health commissioners and physicians. Objectives should be jointly considered by both.

(2) Health should be made a cardinal subject in all teacher training institutions, but it should be practical and obvious, not theoretical and unable to become a part of daily habits.

(3) Corrective gymnastics and diagnosis should be under the direct supervision of physicians.

(4) Minimum training for teaching health should consist of not less than 48 hours—or four hours per week for one semester.

(5) All who pursue a "minor" or "major" in school health training should have a background in physics, chemistry, biology and social sciences, and in addition, the minimum course should consist of the following subjects and corresponding credit hours:

Human anatomy	4 hours
Human physiology	4 hours
Pathogenic bacteria	2 hours
Immunity	1 hour
Epidemic diseases and epidomiology	2 hours
Community health and its administration	2 hours
Child hygiene, with emphasis on habits and nutrition	5 hours

Members of the committee making the above recommendations were: Dr. E. R. Hayhurst, Columbus, chairman; Dr. M. D. Ailes, Akron; Dr. F. R. Dew, St. Clairsville; Dr. H. J. Powell, Bowling Green; Dr. J. J. Sutter, Lima.

Dr. Hayhurst in submitting the report emphasized the necessity of instructing the teacher in the importance of cooperation with the medical profession in school health work and the dangers in attempting to give corrective gymnastics or make diagnosis without the direct supervision of physicians. He also warned against an unbalanced health program and the tendency to overemphasize unimportant phases of school health work.

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A number of feature addresses of the four-days program were made by out-of-state speakers, including Dr. H. E. Barnard, Ph.D., Washington, D. C., director of the White House Conference on Child Health and Protection; Dr. William F. King, director of the Indiana State Department of Health; Dr. George H. Wandel, D.D.S., Chicago, supervisor of the Bureau of Dental Health Education, American Dental Association, and Homer N. Calver, New York, executive secretary, American Public Health Association.

Dr. Bernard, the principal speaker at the annual banquet of the Ohio Society of Sanitarians, explained the objectives and set-up of the White House conference called by President Hoover.

The survey now underway by about 500 representatives of national organizations and individual specialists is being made for the purpose of compiling data on the present status of child health and welfare, according to Dr. Barnard. After the survey is completed, all engaged in the project will meet at Washington and consider recommendations on which to base future work relative to the physical, mental, moral, social and economic factors affecting the children of the nation, he pointed out.

The whole study is divided into four sections, Dr. Bernard said, naming them as follows:

(1). Medical service.
  (a) Prenatal and maternal care.
  (b) Medical care of children.
  (c) Growth and development.

(2). Public health service and administration.
  (a) Public health organization.
  (b) Communicable disease control.
  (c) Milk production and control.

(3). Education and training.
  (a) Family and parent education.
  (b) The infant and preschool child.
  (c) The school child.
  (d) Vocational guidance and child labor.
  (e) Recreation and physical education.
  (f) Special classes.

(4). Prevention, maintenance and protection of the handicapped child.
  (a) Public and private state and local organizations for the handicapped.
  (b) Study of the physically and mentally handicapped.
  (c) Study of delinquency.
  (d) The dependent child.

Dr. Bernard said that in his opinion the better part of a year would be necessary to secure enough data on which to base recommendations for future work in this field.

Dr. King, who spoke in place of Dr. Allen W. Freeman, Baltimore, former director of the Ohio State Department of Health, who was unable to attend the conference, outlined what he considers the fundamental objectives of public health work, namely:

(1). To further reduce the death rate resulting from the commonly known communicable diseases.

(2). The prevention through education and law enforcement of all forms of venereal diseases.

(3). Furthering of educational work in health and hygiene.

(4). Enlargement and extension of prenatal, infancy, maternity and pre-school work by county health departments.

(5). Extension of medical inspection and health supervision in the public schools.

(6). A more concerted effort to establish the custom of regular, periodic health examinations by their family physicians.

(7). Establishment of fuller cooperation between public health workers and practicing physicians.

Expanding on the final objective listed, which he termed one of the most vital of all, Dr. King emphasized the importance of practical cooperation between public health workers and practicing physicians, declaring that public health work can attain little unless it works with and has the support of the medical profession, individually and collectively. He said that the public still regards the family physician as the supreme counsel in all matters pertaining to health. In concluding his talk, Dr. King urged all health commissioners to secure the active, sympathetic and intelligent cooperation of the physicians of their communities and avoid "the idea which some public health workers have that they have a monopoly on public health matters."

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Dr. Wandel delivered an illustrated scientific address on dental hygiene, explaining how public health workers can assist in the work of preventing poor teeth through educating the public as to the value of proper nutrition for the growing child.

The era of emotionalism in public health administration has passed, according to Mr. Calver, and now efficient public health work is regarded as good business by the far-sighted commercial interests of every community. The present health conservation contest being staged by the United States Chamber of Commerce is an example of the interest business men are taking in public health problems, he said, explaining in detail the nation-wide contest which that organization is sponsoring. Every growing industry or business now studies the death rate of the community as carefully as it does the tax rate and the freight rate, he declared.

Ohio's mental hygiene problem was discussed from official and non-official angles by H. H. Griswold, director of the State Department of Public Welfare, and Dr. T. A. Ratliff, Cincinnati, chairman of the Mental Hygiene Committee of the Ohio State Medical Association and president of the Cincinnati Public Health Federation.

Director Griswold gave several illustrations as to how the welfare and health departments can cooperate in the mental hygiene field. Some of his suggestions were:

(1) Assistance of the health department in following up cases paroled from state institutions and seeing they have the proper physical invironment.

(2) Extension of cooperation between the two departments in caring for sick and crippled children who are wards of the state.

(3) Cooperative efforts to stamp out venereal diseases and stimulate a campaign to have all jails and prisons segregate diseased inmates.

(4) Health department assistance in inspecting homes which are being supported by mothers' pensions.

(5) Cooperative efforts to provide more efficient records on working children.

Dr. Ratliff told of the efforts now being made to organize a state-wide society composed of all official and non-official groups doing mental hygiene work and urged public health workers to give their support to the movement.

To emphasize the importance of the mental hygiene question, Dr. Ratliff said:

"To quote from statistics of the National Committee for Mental Hygiene, the 1928 hospital census of the American Medical Association showed that one out of every 325 persons in the United States was a patient in an institution for nervous or mental disorders (including the feeble-minded and epileptic) while only one out of every 2406 persons was a patient in a tuberculosis hospital.

"There are now 300,000 patients in hospitals for mental diseases in this country and the population is increasing at the rate of approximately 10,000 annually.

"Approximately 75,000 new cases are admitted to these institutions each year. If admissions continue at this rate nearly one million of the children and young men and women now in our schools and colleges will be committed to a hospital for mental disease at some period of their lives.

"There are more patients in mental hospitals than there are at any one time patients in all of the general hospitals of the country, and most mental hospitals are at all times so overcrowded that many new cases are denied admission and their rightful chance of recovery.

"According to a recent study of mental disease expectancy in New York State approximately one person out of every 22 of the population becomes a patient in a mental hospital at some time during his or her lifetime.

"The approximate cost of maintenance of the 300,000 mentally ill persons in institutions is $80,000,000.

"Feeble-mindedness is also a major mental hygiene problem, being directly or indirectly responsible for a high proportion of dependency, delinquency and other social problems. There are approximately 500,000 feeble-minded in the country today, of whom only about 50,000 are in institutions."

In concluding his talk, Dr. Ratliff stressed the need for greater interest of public health administration in the mental hygiene question.

"If it is the work of public health to prevent and eliminate disease, to elevate the standards of health and to increase the span of life, then mental health must be a cause of real concern to the health officer," he said. "We call upon you to at least tell about the means of maintaining mental health and thus make a contribution to this important field of preventive health work and medical science."

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Problems confronting public health work in Ohio were discussed by Dr. Charles A. Neal, director of the State Department of Health, in his annual address to the conference.

"One of the big problems ever before us is the matter of finance", declared Dr. Neal. "With each session of the legislature it becomes increasingly difficult to secure funds for state aid, the subsidy paid to local health departments. The raising of revenue has become an ever-increasing problem and as the problem increases the legislative committee become less and less willing to distribute funds to other than purely state functions. Hence the matter of continuing state subsidy becomes more and more a question to conjure with, and I look for it to be discontinued at no remote period, unless more health departments sell public health to their communities and render more public health service."

In urging the health commissioners assembled to place their departments on a more efficient basis, Dr. Neal said:

"It is a very regrettable fact that after 10 years there are still some districts where little or no progress has been made and where the health commissioners have not sold public health to their communities. What is the result? Members of the House and Senate coming from such districts and, knowing full well what their local health department does not amount to, visualize all others as their own, and when funds are requested for a public health program they vote 'no'."

Dr. Neal in describing the serious blow which would be delivered to public health work in Ohio should state-aid be suspended or curtailed, suggested several solutions if such a thing should happen. These were: Increased local budgets, a direct tax levy for health purposes; more careful expenditure of funds and more assistance from nonofficial agencies.

The director urged local health commissioners to cooperate with private health organizations, describing them as "trail blazers" and as having a very definite place in public health work. He also declared that the health commissioner must have the confidence and support of the physicians of his community and must work in harmony with his local county medical society. Dr. Neal said he believed it the duty of every health commissioner to see that the rights of the practicing physician are not infringed upon either by official or non-official health workers. He also discussed the possibility of changes in the method of distributing state subsidies among the local districts and predicted that the time may not be far off when funds will be allotted on a merit basis which means that commissioners must be wide awake or take reduction in working funds.

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A scientific program dealing with the subject of rabies was presented at a general session, at which members of the Columbus Academy of Medicine were guests.

Interesting case records of human rabies were presented by Dr. Samuel J. Hoffman, Cook County Hospital, Chicago. The discussion was illustrated by motion pictures of cases which have been under observation at the Chicago institution.

Dr. Hoffman declared that to his knowledge there has never been a recovery in a case of human rabies after the infection has become well established. He said, however, that prompt medical attention soon after rabies has been acquired has produced recovery in about 90 per cent of all cases on record.

"When people have learned to send for a doctor on the first suspicion of rabies infection; when they have learned to isolate all animals believed to be suffering from the disease and when they have learned to know the frightful effect of the infection, then will the first step in eliminating rabies from the nation have been taken," said Dr. Hoffman.

Dr. Alvin Broerman, veterinarian at the Ohio Experiment Station, Department of Agriculture, Reynoldsburg, Ohio, discussed animal rabies, stressing the importance of control of animal suspects.

This session was opened by a short address of welcome by Governor Myers Y. Cooper, who pledged his personal support to public health work in Ohio and stated that the executive department would do everything in its power to see that the work is continued on a high plane.

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Some of the aims and policies of the State Department of Education in its health and physical education activities were outlined at the conference by D. Oberteuffer, Ph.D., health supervisor of that department.

Dr. Oberteuffer cited four obstacles to the present program of the state department, namely, as follows:

(1) The need for more available scientific subject material.

(2) The need for more teachers having a better understanding of the basic sciences.

(3) The need for more time to present health and physical education instruction to school children.

(4) The need of a better understanding on the

part of the medical profession as to the objects and policies of a health and physical education program, as well as the need for the sympathy, cooperation and support of physicians.

The speaker in summing up the program of the state department in this work offered the following objectives:

(1) To educate boys and girls to know the fundamental principles of good physical and mental hygiene.

(2) To assist in detecting and removal of physical and mental defects, this phase to be primarily a problem for physicians but receiving the active cooperation and assistance of teachers.

(3) To present suitable motor activities.

(4) To establish school environments advantageous to physical and mental health.

Every health commissioner must sell the program of public health to the community he serves, declared Bleecker Marquette, executive secretary of the Cincinnati Public Health Federation, in an address on "Health Education Activities by Voluntary Agencies."

How the health commissioner can make use of the newspapers, radio and other agencies in getting his program across to the public was outlined by Mr. Marquette.

He also emphasized the great need for closer cooperation and harmony between the official health agency, the private health groups and the medical profession. Mr. Marquette declared that public health work has suffered because of misunderstanding and friction between the public health agencies and the medical profession.

"The medical profession is not with us as it should be," he said. "To a small degree, I believe, this is the fault of the medical profession; to a larger degree it is the fault of public health agencies. We have failed in many instances to lay the cards on the table. We have failed often to take the medical profession into our confidence and have failed to get their views on and criticism of our plans and programs. We have not attempted in many instances to picture to them our side of this work and our objectives, going our way and letting them go theirs. We must get together and work in harmony and unison if the great work of public health education is to render the greatest benefit to the public."

Mr. Marquette in conclusion stressed the need for greater emphasis on periodic health examinations and declared that the medical profession must awaken to a realization that the public is demanding more and more that physicians take a greater interest in this movement and equip itself to give more efficient and more complete physical examinations.

A demonstration for health commissioners was held at which a study of undulant fever was presented by Leo F. Ey, director of laboratories, State Department of Health. Mr. Ey discussed this newest public health menace from a scientific standpoint, basing his study on findings which have been made by the health department laboratories in cases which have been referred to them for laboratory analysis. He declared in his conclusions that undulant fever has become one of the most baffling diseases known to man and is much more of a public health menace than a large majority of the public realize. He urged health commissioners to cooperate to the fullest extent in reporting cases of the disease and launching methods of prevention in their communities.

This subject also was discussed by Dr. Walter M. Simpson, director of laboratories, Miami Valley Hospital, Dayton, who has devoted much study to undulant fever along with his outstanding research in tularemia. Dr. Simpson described some of the many symptoms of undulant fever and some of the curative methods now being used. He declared that the vaccine method was now being used quite successfully in many cases but added that this method is too new to merit definite conclusions as to its value.

Pasteurization of milk is the only sure way to preventing milk drinkers from contracting the disease, Dr. Simpson declared in urging universal pasteurization throughout the state and nation.

A written examination on the duties of a health commissioner was conducted by W. W. Charters, Ph.D., director of the Bureau of Educational Research, Ohio State University, and D. A. Hindman, a member of the bureau staff.

The purpose of the examination, according to Dr. Charters, was to obtain data to be used as a basis for instituting a course in public health administration at Ohio State University. What subjects should or should not be taught in such a course will depend largely on the information obtained from the bulky questionnaire which the 150 health commissioners present filled out, Dr. Charters explained.

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Among others who addressed the conference or took part in the meeting as essayists or discussants were:

Dr. H. M. Austin, State Department of Health, "Appraisal of Tuberculosis Services of District Health Departments"; Dr. B. S. Stephenson, Sidney, "Report of International Health Conference at Zurich, Switzerland"; J. S. Shuey, Cincinnati, and F. H. Waring, State Department of Health, "Swimming Pool Sanitation"; Julia J. Groscup, American Red Cross, Columbus, "Community Resources and How Public Health Nurses Can Use Them"; Dr. R. H. Markwith, Akron, "Allocation of Nurses' Time"; Mildred Smith, National Society for Prevention of Blindness, New York, "Prevention of Blindness"; Dr. W. D. Bishop, Greenville, "Supervision of a Milk Supply in a Small City and General Health District"; Zoe McCaleb, State Department of Health, "Measuring Public Health Nursing Activities According to the Appraisal Form"; Dr. E. R. Shafer, State Department of Health, "Annual Reports"; A. E. McKee, Ohio State Journal, Columbus, "Health Publicity from the Newspaper Standpoint."

Semi-Annual Medical Board Examinations Held in December—Lists of Questions Asked

One hundred and twenty-six applicants took the examinations given by the State Medical Board, December 4, 5 and 6 at Columbus.

Thirty-one took the examinations for licenses to practice medicine and surgery. In addition, the following numbers took examinations for licenses in their special field of practice: 4 osteopaths; 14 chiropractors; 44 masseurs; 7 electro-therapists and 26 mechano-therapists. Results of the examinations will be announced at the regular winter meeting of the board on January 7.

On December 10 and 11, examinations for Ohio registration certificates were given to 750 nurses by the Division of Nurse Registration of the State Medical Board.

The questions asked in the written examinations given applicants for medical and surgery licenses follow:

PHYSIOLOGY

1. Give the course of the seminal fluid from secretion to the seminal vesicles.
2. Differentiate the function of the white from gray matter of the encephalon.
3. What are the functions of the pneumogastric nerve?
4. State the influence of the blood circulation on the secretion of urine.
5. How may the functions of the skin be affected as to the amount of secretion?
6. What conditions cause variations in the normal temperature of the body?
7. Describe the secretory action of the parotid gland.
8. Describe the digestion of beefsteak—potato.
9. Diagram a normal jugular pulse tracing. Describe.
10. What is the function of the suprarenal glands? Result of removal?

ANATOMY

1. Give origin, insertion, action and nerve supply of the teres minor muscle.
2. Describe the bones. Give muscle attachments and name the bones with which they articulate.
3. Between what vertebrae do the first and last dorsal nerves leave? Give the divisions and parts supplied by them.
4. Describe the large intestine. Name the subdivisions and glands and give the blood nerve supply.
5. What is the urinary bladder? How is it held in place? Give nerve and blood supply.

DIAGNOSIS

1. Given a new born baby with muscular twitching of face, hands and legs—stupor, cyanosis, refusal to nurse, what would be your diagnosis.
2. Differentiate between right sided acute renal colic and stone obstructing the common duct.
3. What signs and symptoms would lead to a diagnosis of esophageal ulcer?
4. Differentiate between aneurysm of the ascending and descending portion of aortic arch.
5. Differentiate between paranoia and katatonia.
6. In lumber puncture showing a golden yellowish spinal fluid, which coagulates upon standing, what would you suspect?
7. Give signs and symptoms of tuberculosis of the hip in a child.
8. Describe symptoms of cassion disease.
9. Differentiate between symptoms of variola and varicella.
10. Describe symptoms of heart block.

CHEMISTRY

1. Mention a chemical antidote for poisoning by silver nitrate. How does the antidote act?
2. What is an anesthetic? Give the name, chemical formula and properties of one.
3. How does diet influence the elimination of urea? Give explanation.
4. How does sterilized milk differ from raw milk?
5. Describe two chemical tests for blood.

BACTERIOLOGY, PATHOLOGY AND HYGIENE

1. Name three pathogenic bacteria which affect the intestinal tract; how may they be differentiated?
2. Discuss disturbances indicating advisability of "changing the intestinal flora" and state how this may be accomplished.
3. What is meant by "strains" of streptococci? Illustrate.
4. What is filterable virus? Illustrate.
5. What pathologic changes in the eye may result from nephritis?
6. What is the pathology in the thyroid gland in an adenomatous goitre?
7. What is salpingitis? What organism is the usual cause and what is the expected course of the disease?
8. What dietetic measures should be taken to prevent (a) rickets (b) scurvy (c) pellagra?
9. What is the source of undulant fever and how may it be guarded against?
10. What is meant by anthracosis, siderosis and silicosis? How are these conditions produced and how may they be guarded against?

MATERIA MEDICA (Regular)

1. From what is quinine derived? Discuss the action of quinine in malaria and give dose.
2. Give cause, symptoms and treatment of bromism.
3. Give action, uses and dose of terpin hydrate.
4. Outline treatment for acute poisoning from bichloride of mercury.
5. Name with dose a drug which acts as (a) cerebral sedative; (b) cerebral stimulant; (c) to increase perspiration; (d) to decrease perspiration.
6. Discuss the employment of tetanus antitoxin as a prophylactic measure and as a curative agent.
7. Discuss the therapeutic acton of aloes and cascara sagrada.
8. For what purposes are diuretics employed? Discuss the therapeutic action of one.
9. Give the dose, mode of administration and uses of insulin. What are the symptoms of over-dosage and how is it treated?
10. Name three endocrine substances which modify metabolism giving dose of each. Discuss the therapeutic action of one.

PRACTICE

1. Outline your procedures in an instance where a patient seeks your advice because of having been rejected for life insuranec on grounds of glycosuria.
2. What is anuria? Name two conditions when it may be present and outline the treatment of each.
3. What would be your procedures in the case of a young child who is supposed to have swallowed a foreign body, such as an open safety pin?
4. How would you recognize an early stage of general paresis?
5. Give the symptoms of paralysis agitans and differentiate it from disseminated sclerosis.
6. Describe a case of pulmonary vesicular emphysema. Give treatment.
7. Give symptoms of Vincent's angina, diphtheria. Give treatment of each.
8. Outline the treatment of some one form of (1) primary anemia; (2) secondary anemia.
9. Mention symptoms and treatment of acute cystitis.
10. Give the etiology and treatment of hematuria.

OBSTETRICS

1. What is version and rotation? Describe the methods by which each is performed.
2. Give etiology, symptoms and treatment of puerperal septic infection.
3. Diagnose face presentation. How is it managed?
4. What methods would you use to make labor less painful?
5. Give two main rules for the treatment of uterine inertia in labor.

SURGERY

1. Name three surgical methods used in the treatment of aneurysm.
2. What are the uses of bismuth paste in surgery?
3. What conditions may complicate a dislocation of the hip?
4. A patient comes to you with wrist drop following a previous fracture of the humerus. Give diagnosis—outline your treatment for this condition.
5. A man falls from building to pavement, he enters hospital, examination of abdomen reveals board-like rigidity, extreme tenderness, loss of liver dullness, severe abdominal pain, air hunger, rapid pulse, high white cell count. Give diagnosis and treatment.
6. Differentiate between (a) uterine fibroma, (b) ovarian cyst, (c) carcinoma of fundus. Outline briefly treatment of (c).
7. Make diagnosis, outline treatment of abscess of cerebellum.
8. Outline treatment for penetrating gunshot wound of cardiac sac.
9. Give treatment for rectal fistula.

10. Describe the method you would use in attempting resuscitation of patient who had respiratory failure under anesthesia.

SPECIALTIES

1. Define nystagmus? What pathological conditions will cause it to appear?
2. Describe in detail the lateral wall of the nose.
3. What aural tests are given aviators?
4. Outline the treatment of exfoliating dermatitis due to salvarsan?
5. Name three dermatoses due to the tubercle bacillus or its toxins.

HOMEOPATHIC MATERIA MEDICA

1. What are the skin symptoms of graphites?
2. Give the changes in the cerebrum produced by opium?
3. What do you understand by pathological prescribing?
4. Describe the changes made in mucous secretions by pulsatilla?
5. What conditions of the buccal cavity call for Aurum Tri?
6. Does iodine affect the nutrition? If so, how?
7. Describe the effect of Aurum upon the long bones?
8. Give the indications of cactus in heart disease?
9. What are the mental symptoms of sepia?
10. When is cantharis indicated in gonorrhea?

Federal Prohibition Permits for 1930

Some Ohio physicians who have neglected to apply for renewal of permits to prescribe and dispense alcoholic medicine for 1930 are apparently confused as to the proper procedure in obtaining their permits, according to information obtained at the office of the Prohibition Administrator, 35 East Gay Street, Columbus, Ohio.

An analysis of the methods to follow in renewing or obtaining permits, as well as some of the federal regulations governing medicinal liquor, is made in the following paragraphs for the benefit of Ohio physicians generally.

Under federal regulations all permits issued prior to September 1 of any calendar year expire on December 31, of the same year, and if issued after August 31 of any calendar year expire on December 31 of the succeeding calendar year.

Applications for renewal of permits may be filed on or after July 1 and not later than August 31 preceding the expiration of any permit on the following December, unless the prohibition administrator grants an extension of time for the filing of renewals. The regulation governing this reads: "That if a permittee who desires a renewal of his permit has failed to file such application before August 31 of any year, the administrator may, in his discretion and for good cause shown, allow such application to be filed at any time prior to November 30 of the same year."

The federal regulations specifically provide that after November 30 of any year any person desiring permit privileges for the succeeding calendar year must apply as for a new permit.

Procedure to be followed in applying for a new permit is covered in sections of Article No. 2 of Regulations 2, of the Bureau of Prohibition, U. S. Treasury Department.

Special attention is called to interpretations and discussions of the federal law and regulations relative to prescribing and dispensing medicinal alcohol and the handling of prescription books and stubs, published on pages 637-638 of the August, 1928, issue of the *Ohio State Medical Journal;* pages 797-798 of the October, 1928, issues and pages 47-48 of the January, 1929, issue.

Physicians should also refresh their memory on methods to be followed in obtaining additional prescription blanks within the 90-days period designated by law as the life of a prescription book and in the writing of prescriptions in times of emergency when a physician's supply of regulation blanks has become exhausted. These regulations were analyzed on pages 139-140 of the February, 1929, issue of *The Journal.*

All physicians who hold permits are advised by the Prohibition Administrator to be especially careful to observe all regulations, especially those relative to the return of stubs to the Administrator. Each stub is examined by the Administrator's office to ascertain certain information, some of which is outlined as follows as a matter of emphasis:

(1) Whether the previous book was issued within 90 days.

(2) Whether the stubs are signed by the physician in his own handwriting.

(3) Whether the physician's signature and address agree with the card record.

(4) Whether the prescriptions have been written in chronological order.

(5) Whether the kind and quantity of liquor and directions for use are properly stated.

(6) Whether two prescriptions were written for the same patient within 10 days.

(7) Whether the prescription has been given for a disease usually prescribed for.

(8) Whether any prescription was written by the doctor for himself.

SAFEGUARDING PRESCRIPTION BOOKS

Physicians holding official liquor prescription books should provide a place of safe-keeping for them to prevent illegal use of the forms by unauthorized persons.

Loss of a book of prescriptions under circumstances that indicate carelessness or collusion can be interpreted as a lack of good faith on the part of the physician and might lead to a citation by the Federal Prohibition Administrator to show cause why his permit should not be revoked.

In a recent issue of the Pennsylvania Medical Association Journal, special emphasis was placed upon the physician's responsibility in this matter because of evidence that a systematic plan had been devised for stealing these books, forging physicians names and then using them to procure illegal supplies of intoxicating liquor.

As a matter of protection to himself, every Ohio physician who holds liquor prescription permit should readily comply with this warning to guard well his prescription forms.

WARNING ON IMPOSTERS

One or more persons posing as physicians and attempting to obtain money under false pretenses from Ohio physicians are known to be operating in the state at the present time.

Reports of the activities of the imposter, or imposters, have been received from various parts of the state by the Headquarters Office of the State Association.

All members of the Association should be cautious in dealing with strangers who claim to be physicians and graduates of reputable medical colleges, especially in the matter of cashing checks or lending money.

George A. Fox, whose fleecing activities have been recorded from time to time in the *Journal of the American Medical Association*, (Issues of September 26, 1925; August 14, 1926, and December 4, 1926), was in Columbus recently and is said to have obtained money through employment of one of his many "gyp" games. Fox, who is said to be well-versed in medical events and statistics, is about 48 years old, slightly round-shouldered, has a scar on the left undersurface of his chin, and walks with a slight limp.

Reports from Toledo state that a man posing as the son of a prominent member of the Toledo Academy of Medicine has been attempting to defraud physicians in various parts of the Middle West.

This imposter or Fox may have been the man who has been calling on physicians in a Southern Ohio city and attempting to obtain funds. Since this man, who claims to be a graduate of Rush Medical College, does not exactly answer the description of Fox, it is very probable that one or more imposters are at present seeking victims in Ohio.

Unlabeled Specimens Sent to State Laboratory

A recent inquiry conducted by the State Department of Health has revealed that since January 1, 1929, 167 specimens have been shipped to the laboratories of the state department unaccompanied by the name or address of the sender.

A statement issued by the department on this unusual large number of examples of negligence on the part of health commissioners and physicians points out that a specimen sent to the laboratories without anything in the way of markings to identify it causes much confusion at the laboratories and leaves the sender in a state of unrest and suspense. It is also pointed out that such carelessness results in the placing of unnecessary blame and distrust on the laboratories.

A recent case where the head of dog was received at the laboratories, minus any identifying marks, is cited as an example of the disturbing situations created through neglect on the part of the sender. In the case mentioned, the dog's head was tested and found positive for rabies. Through the strenuous efforts of the laboratories in cooperation with the daily press, the name of the sender finally was established, but only after several days delay.

The department is anxious that all persons sending in specimens for diagnosis and tests attach to each the name and address of the sender, as well as any other details which might be an aid to the laboratories in making the tests.

TERRIFIC COST OF PREVENTABLE SMALLPOX

A statistician for the Illinois State Department of Health has figured out that in the past 10 years, smallpox has cost that state almost $800,000 and has resulted in a loss of time, through quarantine of patients or persons exposed, amounting to 3503 years.

An account of these findings, published in the *Illinois State Medical Journal*, says that public health officials estimate that the cost of controlling smallpox in Illinois averages $25 per case. These same officials figure that at least two persons are quarantined in a smallpox case for a period of 21 days.

Public health administration does not differ greatly in individual states, so it would seem logical to assume that the costs of smallpox control in Illinois and Ohio would be approximately the same.

What has smallpox cost Ohio during the past few years, if the cost is figured on the same basis?

Records of the State Department of Health show that from 1920 to 1928, inclusive, there were 33,874 cases of smallpox reported from Ohio counties. Figuring the average cost of each case at $25, this means that the State of Ohio alone has expended $846,850 in the past nine years in fighting the spread of this disease. Assuming that an average of two persons have been quarantined for 21 days in the 33,874 cases reported, the number of days spent in quarantine totaled 1,422,708, or 3930 years.

These statistics do not take into consideration physicians' fees, other expenses incidental to the illness and the enormous financial loss to patients and others quarantined through unemployment during the period of quarantine.

Looking at the smallpox situation in Ohio from the economic standpoint alone, it is apparent that vaccination as a definite prevention is the only wise policy for any and all communities.

The following have been granted medical and surgery licenses through reciprocity by the State Medical Board: Dr. Russell M. Arnold, Cleveland, College of Medical Evangelists; Dr. Henry H. Gibson, Akron, University of Louisville; Dr. James L. Sagebiel, Dayton, Harvard Medical School, and Dr. Thomas J. Herbert, Portsmouth, Medical College of South Carolina.

Should Physicians Execute Wills and If So, Why?

Whether or not physicians are "good business men" as has been so frequently debated, there may be definite and clear reasons for economic provisions for one's dependents in a manner that will meet the wishes and "will" of a physician following his death.

Shakespeare says:

"Let's choose Executors and talk of Wills;
And yet not so—for what can we bequeathe
save our deposed bodies to the ground."

The importance of a will is not usually appreciated although it constitutes the final expression of one's wishes respecting the labor and material accumulation of a life time, according to a special article by F. A. Schack, Trust Officer of the First National Bank of Fort Wayne, in the *Indiana State Medical Journal.* He likewise points out that "a will is that which is to live after you". "Future happiness and welfare of the persons and objects dear to you depend upon the careful and faithful construction of your will."

The high points in his comments and advice follow:

"*Your Will:* You are the person who is most familiar with your own property. You understand the temperament and abilities of your various heirs. This makes you the best judge as to how your property should be distributed. You may desire to remember some person dependent on you who has no legal claim, or some friend who has done you a great service, or a certain charity whose welfare might be threatened if your support is withdrawn. There are many, many reasons why your will should be drawn and drawn today. Would it not be advisable to attend to this duty now?

"Of course, 'no one is so old as to think that he may not live a year.' If it be winter, the average man of any age is sure that he will carry on to see the robins return and to breathe fresh life with the spring. And, in summer, he knows full well that he is not destined to pass out until he has harvested this year's garden crop. Death is never imminent; we take a day off to attend the funeral of a man whose desk was next to ours in the office, and returning from the cemetery, we say to ourselves, 'I ought to put my affairs in shape, so that my wife will be alright in case anything should happen to me.' But we do not do it. 'I'm right in the midst of things, now,' we say. 'In another ten years, I'll have something worth while writing down in a will. Then, I'll want to think the matter over carefully and arrange a fair division between my wife and the children. But, it's hardly worth while troubling about now.' The man in the scripture is typical of most of us. 'Things are going well with me,' he said in effect. 'I will pull down my barns and build greater.' That night his soul was required of him.

"*Is a Will a Luxury?* Another reason why will making is not popular is because there is a general impression that a will is a luxury for the rich. Mr. Millionaire, when he dies, will leave his estate carefully guarded by a long legal document; but the man who has nothing but a house and a lot and five hundred dollars in the bank assumes that it isn't enough to bother the court about. So, he dies, and his wife, who might, under a proper will have entered into the enjoyment of his estate at once with very little formality, finds herself compelled to give bond and go through an immense amount of red tape, and is fortunate if she is not involved with irate relatives before negotiations are completed. Even if she comes through safely, she has paid more than she can afford in fees and charges, all of which would have been largely obviated by a proper will. A rich man's will may be a luxury, but it is a necessity of the man of small means; and the smaller the estate, the more a will is essential.

"Any will at all is better than no will. But the will which simply leaves money or other property in bulk to a woman who has never had even her own checking account; or to children utterly unskilled in business affairs, or even to the guardianship of his next best friend, who is busy with his own interests, is a doubtful blessing in most cases. Your will must be properly drawn. No layman should be entrusted with the making of your will. It should, in all cases, be prepared by a skilled lawyer. Every conceivable contingency must be taken into consideration. It should be drawn by one possessing legal skill and foresight, capable of providing for all possible events, as your will speaks from the death and not from the date of its making. It must be fully, yet concisely, worded. But who is to be called upon to execute your directions? It must be someone who will live longer than the testator, or the person making the will. It must be someone who, by experience and ability, is qualified to understand the duties entrusted to him in the most economical way and with the greatest safety; it must be someone who can be held responsible for any errors he may make, having sufficient resources of his own to permit reimbursement to the estate for losses incurred through his fault; it must be someone who will not show favoritism to one of the heirs to the disadvantage of the others; and it must be someone who is willing to undertake the duties and responsibilities, and who is able to devote all of his time and energy to the task. What individual combines all of these qualifications?

"If your will is already made, it is your privilege to change it. You should name a bank with

trust powers as executor or trustee. Have your lawyer add a postscript, called a codicil, effecting the change.

"*Confidential Service:* The personal advice of the trust department of a bank is at the disposal of yourself and your legal advisor in those cases wherein the institution is to be named as executor-trustee, or guardian. It should be understood by those contemplating the service of any Trust Department that they may freely and frankly discuss their private and family affairs without any fear of violation of the strictest rules of confidence. The fiduciary relationship in matters of private nature is respected to the utmost degree.

"Name a competent executor rather than have the state appoint an administrator and dictate the division of your property. As executor of your will, a bank will serve you after your death by serving the best interests of your heirs, or legatees under the will. The existence of a trust department and its ability to perform the duties of testamentary appointments are not dependent upon the life and health of any one man or group of men. You are assured of permanent service, because it will continue to live and perform its duties. If you appoint your next friend or relative as your sole executor, you do not have this assurance. Moreover, he may not have the necessary experience or knowledge for the work, or if he has, he may not be able to spare the time from his business to attend to yours. The trust department of a bank has every necessary qualification of performing duties of trusts.

"*Absolute Responsibility:* Although a man may speculate with his funds during his lifetime, he desires that there be no risk in the proper care of that which he leaves to those dependent upon his bounty. A bank, through its trust department, keeps separate and apart from the assets of the bank, all investments and funds belonging to estates.

"*What Trust Service Costs:* The fees allowed for this particular type of service are controlled by law and cannot in any instance be greater than those allowed to individuals, and in most cases are less. The reasons are several. A bank is, of course, in business for profit, but its primary consideration is at all times "service," and in no branch of its many activities is this more heavily stressed than in its fiduciary capacities. In this, a bank through its trust department serves its customers in the most personal way. A bank is authorized to act by law without bond, which means a considerable saving of time and expense to the estate. Facilities for safe keeping securities and records have already been provided. The outlay for appraisals, clerical help, supplies and other maintenance costs, instead of being charged to one estate, are apportioned among many estates. Moreover, familiarity with administrative details eliminates expensive experiments. A bank naturally carries many 'overhead' expenses which an individual executor properly charges against the estate."

Permanent and Always Available: The individual may die; may be away or otherwise unavailable when an emergency might require an immediate consultation by those interested in the estate. A trust department can always be found in the same place every business day. The individual seldom has the proper facilities for exact accounting required by law, and lax methods of administration have often resulted in serious losses. Trust Department methods and systems of accounting must be exact and in full conformity with the requirements of the law. They leave nothing to memory.

"In this day and age, very few men are naming an individual as a representative of their estates —as executor. Business men of the country are naming a bank with trust powers—a corporate executor and trustee to act as their representative. This really is the modern business-like way of handling any business matter.

This may start you thinking of—

The Duty of Today: There are certain obligations vital to the future of his family, which every man ought to recognize. There are many cases where the man was going to make provisions "tomorrow," or "next week," or "the first minute he got 'round to it." This man is no less blameworthy than the man who has not considered them at all.

There is no excuse for failure to have a will. This article has been written to clarify, emphasize and urge its importance. The same covers only a few points of general appeal.

These are matters not of tomorrow—*but of today.*

Six men who rank among the world's greatest scientists have been appointed by the National Research Council to cooperate with the officials of the Chicago World's Fair in developing the scientific theme of the city's centennial celebration. They are: Dr. Max Mason, former president of the University of Chicago; Dr. William Allen Pusey, Chicago, former president of the American Medical Association; Frank Baldwin Jewett, vice president of the American Telephone and Telegraph Company; Dr. Simon Flexner, medical head of the Rockefeller Institute for Medical Research and chairman of the Public Health Council of New York; Dr. Vernon L. Kellogg, secretary and chairman of the Division of Educational Relations of the National Research Council and author of many works on biology and zoology; Gano Dunn, noted electrical engineer and Dr. Michael I. Pupin, professor of electrical mechanics at Columbia University.

Deaths in Ohio

Walter C. Bennett, M.D., Mt. Gilead; University of Wooster, Medical Department, Cleveland, 1877; aged 76; member of the Ohio State Medical Association, and Fellow of the American Medical Association; died December 1 at Mt. Carmel Hospital, Columbus, of diabetes. With the exception of a year he served as probate judge of Morrow County, he had been in active practice since his graduation over fifty years ago. He had served as a member of the Morrow County Board of Pension Examiners and as a member of the county draft board during the World War. At the time of his death he was president of the Morrow County Medical Society. He is survived by his widow, six daughters and two sons.

Jacob Bohl, M.D., Marietta; Miami Medical College, Cincinnati, 1887; aged 73; member of the Ohio State Medical Association and the American Medical Association; died November 25, after a long illness. Dr. Bohl began the study of medicine with his father, the late Dr. John Bohl. Following graduation he opened an office at Watertown, where he practiced for four years before locating in Marietta. His widow and one daughter survive him.

Thomas Bowles, M.D., Harrison; Eclectic Medical College, Cincinnati, 1898; aged 77; died November 9 of heart disease. He had practiced in Harrison and Butler county for thirty years. Surviving him are two daughters and a sister.

Oscar Howard Dunton, M.D., Circleville; Rush Medical College, Chicago, 1893; aged 71; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 23 at Grant Hospital, Columbus, of uremic poisoning. Dr. Dunton had practiced in Circleville for more than thirty-five years. At the time of his death he was treasurer of the Pickaway County Medical Society, and for many years he was president of the Board of County Visitors, and represented Pickaway County for many years at state and national conferences on charities and corrections. Dr. Dunton held a bachelor's degree in mechanical engineering from the University of Maine, and devoted eight years to that profession before taking up the study of medicine. He is survived by his widow, two sons and two daughters; and three sisters.

Jackson A. Frank, M.D., Columbus; Starling Medical College, 1904; aged 48; member of the Ohio State Medical Association and the American Medical Association; died December 5 at University Hospital, of acute nephritis. Following graduation, Dr. Frank opened an office in St. Mary's, where he practiced until he joined the staff of the State Department of Health in 1918, as assistant epidemiologist. At the time of his death he was chief of the division of hygiene. His widow survives him.

John J. Gooding, M.D., Uhrichsville; University of Wooster, Medical Department, Cleveland, 1875; aged 76; former member of the Ohio State Medical Association; died December 9 of arteriosclerosis. Dr. Gooding had practiced more than fifty years in Tuscarawas county, prior to his retirement. He is survived by one daughter.

G. Clarence Hamilton, M.D., Louisville; College of Physicians and Surgeons, Baltimore, 1886; aged 64; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 13 following an illness of six months. He had practiced in Stark County for thirty-eight years. Surviving him are his widow and two sons, one, Dr. Ian B., a practicing physician at Canton.

Jay M. Harrison, M.D., Toledo; Toledo Medical College, 1905; aged 52; died December 1 at Toledo Hospital, of pneumonia. Following graduation he took post graduate work at Rush Medical College, Chicago, and in 1906 opened an office at Carey, where he practiced until 1911 when he removed to Toledo. He was a veteran of the World War. His widow and his parents survive him.

Howard I. Heavilin, M.D., Cadiz; Ohio State University College of Medicine, 1910; aged 49; member of the Ohio State Medical Association and the American Medical Association; died November 12 of cerebral hemorrhage. Dr. Heavilin had practiced in Cadiz since his graduation, with exception of a period spent in post graduate work at City Hospital, New York. At the time of his death he was president of the Harrison County Medical Society. He is survived by his widow, one daughter and one son.

Jennings M. King, M.D., Wellsville; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, 1897; aged 57; Councilor of the Seventh District of the Ohio State Medical Association and Fellow of the American Medical Association; died December 8 at Allegheny General Hospital, Pittsburgh, following an operation for gastric ulcers. Dr. King practiced in West Virginia before locating in Wellsville in August, 1914. He took an active part in medical organization, and had served as secretary and as president of the Columbiana County Medical Society before his appointment on January 7, 1923, to the Council of the State Association, to fill the unexpired term of the late Dr. James S. McClellan, Bellaire, who resigned at that time because of ill health. Dr. King was elected as councilor of the Seventh District in May, 1923, and was elected to succeed himself at



JENNINGS, M. KING, M.D.

the annual meetings held in 1925; 1927 and 1929. In addition to his councilor duties, he had served as a member of several important committees of the State Association. During the World War, Dr. King served as a member of Draft Board No. 1 of Columbiana County. He was past president of the Kiwanis Club, and of the Chamber of Commerce of Wellsville, and a director of the Peoples National Bank since 1918. He is survived by his widow, a daughter, Mrs. Lessie Tipton, of Logan, and a son, Dr. Jeninngs M. King, Jr., of Pittsburgh; three sisters, and a brother, Dr. W. W. King, president of Ozark Wesleyan College at Carthage, Missouri.

Harry T. Miller, M.D., Springfield; New York Homeopathic Medical College and Flower Hospital, 1888; aged 63; member of the Ohio State Medical Association and Fellow of the American Medical Association; died December 9 of pneumonia. Dr. Miller, son of the late Dr. John M. Miller, had practiced in Springfield for forty years. Following his graduation he served as interne for one year at Ward's Island Hospital in New York.

James N. McMaster, M.D., Akron; Medical College of Ohio, Cincinnati, 1896; aged 63; member of the Ohio State Medical Association and the American Medical Association; died November 15 of heart disease. Dr. McMaster practiced in Belmont County for thirty-eight years before locating in Akron over twenty years ago, and continued in practice with his son, Dr. S. E. McMaster and grandson, Dr. Stowell N. Brown, until his death. He was a veteran of the Civil war. In 1926 he was honored with a dinner given by the Summit County Medical society, in commemoration of his years of medical service, and shortly before his death, was awarded a special Masonic medal for membership exceeding fifty years. Surviving him are one daughter, Mrs. A. A. Brown, and two sons, Dr. S. E. McMaster, and Dr. W. H. McMaster, president of Mt. Union College.

Ancel C. Sherrard, M.D., Oakwood; Cleveland College of Physicians and Surgeons, 1884; aged 72; member of the Ohio State Medical Association and the American Medical Association; died November 26. Dr. Sherrard had practiced at Oakwood for forty-five years. He is survived by his widow, one daughter, one sister, and three brothers.

Martyn Taylor, M.D., Portsmouth; Medical Colelge of Ohio, Cincinnati, 1896; aged 63; member of the Ohio State Medical Association and Fellow of the American Medical Association; died October 22 of pneumonia. Dr. Taylor had practiced for thirty-three years, with most of this time spent at Fort Recovery. Eight years ago he returned to Sciotoville, his childhood home, and where his father, Dr. Martyn Taylor, Sr., practiced before his death. Surviving him are his widow and one daughter.

Eugene Wilson, M.D., Mt. Hope; Ohio Medical University, Columbus, 1906; aged 62; died November 13 of heart disease. He had practiced in Holmes County for several years. His widow and two sons survive him.

KNOWN IN OHIO

Louis A. Nippert M.D., Minneapolis, Minnesota; Miami Medical College, Cincinnati, 1883; aged 49; fellow of the American Medical Association; died November 6 from injuries received when struck by an automobile while horseback riding. Dr. Nippert served as an interne and later as staff physician for five years at Cincinnati Hospital before locating in Minneapolis. He is survived by his widow, a daughter; two sisters, and four brothers—Dr. Henry Nippert, St. Paul; Dr. Edward Nippert, Los Angeles; Herman Nippert and Judge Alfred K. Nippert, of Cincinnati.

Funds have been authorized by the Cincinnati Academy of Medicine to its Public Information Committee for a campaign to obtain the ingredients of a serum to be used in the treatment of infantile paralysis. The Public Information Committee has requested each member of the Academy to send in the names of patients who have had infantile paralysis in order that the committee may, if possible, obtain a small amount of blood from them to be used in production of the serum. A publicity campaign informing the public of its work, giving important information on the disease and seeking the cooperation of the public has been launched by the committee.

Sale of medicines under promise of impossible cures has been greatly reduced through cooperation between the Food, Drug and Insecticide Administration and the Federal Trade Commission, according to a report for the fiscal year 1928-29 made by Walter G. Campbell, director of regulatory work of the Department of Agriculture.

News Notes From County Societies and Academies

First District

(Edward King, M.D., Secretary)

December 3—Program: Lecture illustrated by motion pictures, by Dr. Henry J. Gerstenberger, Cleveland, professor of Pediatrics, Western Reserve University, School of Medicine.

December 9—Dr. Robert Kehoe presented an address on "Lead Poisoning".

December 16—Dr. Hugh Cabot of Ann Arbor, Michigan, Professor of Surgery of the University of Michigan, spoke on "Catheter Cystitis".

A clinical lecture on "Diseases of Children" was held on December 12 at the General Hospital, by Dr. Graeme Mitchell and Dr. Frank E. Stevenson. Program.

Butler County Medical Society met Wednesday afternoon, November 13 at Mercy Hospital, Hamilton. Visiting speakers were Dr. J. A. Caldwell, Councilor of the First District, Cincinnati, Dr. Walter P. Simpson, and Dr. L. A. Martin, of Dayton. At the business session, Dr. Mark Millikin was re-elected president, and Dr. P. E. Decatur was re-elected secretary-treasurer of the Society. Following the meeting, a six o'clock dinner was served to members present.

Clermont County Medical Society held its annual meeting in the School Auditorium, Bethel, on Wednesday, November 20. A dinner at 12:30 was followed by a business session, which included election of the following officers for 1930: President, Dr. Thomas Longworth, Felicity; vice president, Dr. H. E. Cover, Bantam; secretary-treasurer, Dr. Allan B. Rapp, Owensville, re-elected; correspondent for *The Journal*, Dr. W. H. Gaskins, New Richmond; legislative committeeman, Dr. T. A. Mitchell, Owensville; medical defense committeeman, Dr. F. H. Lever, Loveland; delegate to annual meeting, Dr. Thomas Longworth, with Dr. Rapp, as alternate. The program which followed consisted of a paper on "Primary Treatment of Accidental Wounds" by Dr. Charles T. Souther, of Cincinnati, and "Digitalis, Indications and Contraindications", by Dr. Clifford Straehley, also of Cincinnati.—Program.

Fayette County Medical Society held its regular meeting on Thursday, December 5, at Washington C. H., with Dr. Robert Drury, Columbus, as speaker. His subject was "Diagnosis of Abdominal Condition". At an adjourned meeting of the society on December 12, the following officers were re-elected for 1930: President, Dr. Roy E. Brown; vice president, Dr. C. C. Crum; secretary-treasurer, Dr. James F. Wilson; legislative committeeman, Dr. R. M. Hughey; medical defense committeeman, Dr. L. L. Brock; delegate to state meeting, Dr. Hughey, and alternate, Dr. D. C. Gaskins.—J. F. Wilson, Secretary.

Second District

Champaign County Medical Society met at Miller's Restaurant, Urbana, on Thursday, November 14. Following a noon luncheon, Dr. J. F. Beachler, of Piqua, gave an illustrated lecture on "Diseases of the Gall Bladder".—News Clipping.

Clark County Medical Society held a luncheon meeting at Hotel Shawnee, Springfield, on Wednesday, November 13. An interesting paper on "Toxaemia of Pregnancy and Eclampsia" was presented by Dr. W. D. Inglis, of Columbus. The semi-monthly luncheon meeting held on December 11 was addressed by Dr. H. A. McKnight, of Springfield, on the subject, "The Surgical Abdomen".——News Clipping.

Darke County Medical Society met Thursday, November 14, at the local health office, Greenville. The visiting essayist was Dr. C. A. Coleman, of Dayton.—News Clipping.

Greene County Medical Society held its annual business meeting on Thursday morning, December 5, at the Court House, Xenia. The society voted to urge the public to use only pasteurized milk, and to urge city commissioners to pass an ordinance requiring that all milk be pasteurized. Officers elected for 1930 are: President. Dr. H. C. Messenger, Xenia; vice president, Dr. W. C. Marshall, Yellow Springs; secretary-treasurer, Dr. M. M. Best, Xenia (re-elected); delegate to State Meeting, Dr. R. H. Grube, and alternate, Dr. L. L. Taylor.——News Clipping.

Montgomery County Medical Society met for its regular meeting on Friday evening, December 6 at the Gibbons Hotel, Dayton. The speaker for the evening was Dr. Clarence King, Cincinnati, whose subject covered "Some Practical Aspects of Common Eye Diseases".——Program.

Shelby County Medical Society held its annual meeting in the Chamber of Commerce Rooms on Friday, December 6th, 1929, at 4:00 P. M. The following officers were elected for the coming year: Dr. M. F. Hussey, president; Dr. A. W. Hobby, vice president; Dr. Benjamin S. Stephenson, secretary; Dr. A. W. Grosvenor, treasurer; Dr. V. W. LeMaster, censor for three years; Dr. R. E. Paul, delegate to State Convention; Dr. F. R. McVay, alternate to Convention. Mr. Smith, of the Petrolagar Company in Toledo, gave interesting effects of different drugs on the stomach and intestines by means of slides showing the increase and diminution of peristaltic action under the stimuli of different drugs.—B. S. Stephenson, Secretary.

Third District

Allen County—The Academy of Medicine of Lima and Allen County met Tuesday evening,

November 19 at the Academy rooms, Lima. "The Fundamentals of Anesthesia" was the subject of an address by Dr. E. I. McKesson, of Toledo.—News Clipping.

Marion Academy of Medicine met November 8 in Marion. The guest speaker was Dr. George R. Critchlow, Buffalo, New York, who gave an interesting address on "The Thyroid Patient". His talk was followed by an illustrated surgical paper by Dr. Carl W. Sawyer, of Marion. On Friday evening, November 15, the Canti Cancer film was viewed by members at the Sawyer Sanatorium. The December meeting of the Academy was devoted to a business session, when the following officers were elected for 1930: President, Dr. F. E. Mahla; vice president, Dr. Thomas H. Sutherland; secretary, Dr. Robert G. McMurray; treasurer, Dr. E. L. Brady; correspondent to *The Journal*, Dr. McMurray; legislative committeeman, Dr. C. J. Altmaier; delegate to State Meeting, Dr. R. T. Morgan, and alternate, Dr. B. D. Osborne.—T. H. Sutherland, Secretary.

Fourth District

TOLEDO ACADEMY OF MEDICINE

(H. B. Meader, M.D., Secretary)

December 6—General meeting of the Academy, followed by a buffet supper at the University Club. Program: "Technique of Elective Version and Immediate Repair of Birth Canal Injuries Following Delivery", with lantern slide demonstration, by Dr. Irving W. Potter, Buffalo, New York.

December 13—Section of Pathology, Experimental Medicine and Bacteriology. "The Humer Syndrome; a Fact or a Fancy?" by Dr. E. W. Huffer, with discussion by Drs. Lewis F. Smead and John G. Keller.

December 20—Medical Section. "The Influence of Drugs on Gastro-Intestinal Motility". Motion picture filmed by Drs. H. B. Kellogg and L. W. Dowd of Northwestern University, Department of Anatomy, by D. H. Smith, R. Ph., Chicago, Ill.; "Pyelitis in Infancy and Childhood", by Dr. S. D. Giffin, Toledo; "Obstructive Lesions of the Urinary Tract in Children", by Dr. A. B. Johnson, Toledo.

December 27—Surgical Section. "Orthopedics", by Dr. Carl E. Badgley, Detroit, formerly professor of Orthopedics at the University of Michigan, and now director of Orthopedics in Ford Hospital.—Program.

Henry County Medical Society entertained members of the Four County Medical Society on Thursday, November 21 at Bryan, with members present from Defiance, Henry, Lucas and Williams counties. The visiting speaker was Dr. A. L. Steinfeld, of Toledo. A six o'clock dinner was served following the program.—News Clipping.

Putnam County Medical Society held its regular monthly meeting at the DuMont hotel, Ottawa, on Thursday evening, November 7. A dinner at 6:30 was followed by an address by Dr. P. I. Tussing, of Lima.—News Clipping.

Fifth District

ACADEMY OF MEDICINE OF CLEVELAND AND THE CUYAHOGA COUNTY MEDICAL SOCIETY

(Claude D. Waltz, M.D., Secretary)

December 4—Obstetrical and Gynecological Section. Program: "Puerperal Infection—To Whom Does the Credit Belong for Discovering its Etiology" (stereopticon), by Dr. J. J. Thomas; "Tricomonas Vaginalis" (stereopticon), by Dr. Robert L. Faulkner; "Routine Delivery—Film Demonstration", by Dr. S. B. Abrams.

December 11—Pediatric Section. Program: "The Newer Aspects of Irradiated Ergosterol", by Dr. Alfred Hess, New York City.

December 13—Experimental Medicine Section. Program: "Blood Calcium Methods", by Dr. J. W. Mull; "Mineral Content of the Diet in Relation to the Nutrition and Growth of Albino Mice" (by invitation), F. C. Bing, B.A.; "Alkalosis in Cases of Nephritis with Hypertension", by Dr. C. T. Way, and E. Muntwyler, Ph.D.; "Acid-Base Balance Changes in Nephrosis", E. Muntwyler, Ph.D., and Dr. C. T. Way. "Further Observations on the Influence of Inorganic Elements in Nutritional Anemia", by H. H. Beard, Ph.D., and V. C. Myers, Ph.D.; "Methylguanidine in the Blood in Hypertension" (by invitation), J. J. Pfiffner, Ph.D. and V. C. Myers, Ph.D.

December 18—Industrial Medicine and Orthopedic Section. "Arterial Hypertension in Industry", by Dr. James N. Wychgel; "Bone Anomalies and Variations" (stereopticon), Dr. Merthyn A. Thomas.

December 20—Annual Academy meeting. "Votaries of the Dragons", by Dr. T. Wingate Todd; annual reports of president and secretary-treasurer; report of election of directors. Art and Hobby exhibit by Academy members. Buffet luncheon followed by social hour.—Bulletin.

Ashtabula County Medical Society held its annual meeting on Tuesday, December 10 at the Medical Building, Ashtabula. Present officers were re-elected for the year 1930: President, Dr. A. J. Pardee; vice president, Dr. P. J. Collander; secretary-treasurer, Dr. William Millberg; legislative committeeman, Dr. R. B. Wynkoop; delegate to State Meeting, Dr. B. C. Eades, and alternate, Dr. R. B. Wynkoop. The scientific program consisted of a lantern slide demonstration and talk on "Thrombosis of Coronary Arteries" by Dr. R. W. Scott, of Cleveland. The November meeting on Tuesday evening, November 12 was the first following the summer recess. The following program was presented: "Gun Shot Wounds of the Abdomen", by Dr. R. B. Wynkoop; "Diabetes", by Dr. J. H. Park; "Gall Bladder Surgery", by Dr. S. H. Burroughs; "Nystagmus"

by Dr. W. F. Gessler; "X-ray Work, especially of the Gall Bladder", by Dr. P. J. Collander; "Tabes", by Dr. J. J. Hogan. Following adjournment, twenty-six members present enjoyed a buffet luncheon served by office girls of the Medical building.—William Millberg, Secretary.

Erie County Medical Society held its regular monthly meeting at the Rieger Hotel, Sandusky, on Wednesday noon, November 27. Dr. Theodore Miller, Cleveland, spoke on "Changing Aspects of Obstetrical Practice". Discussion was opened by Dr. J. D. Parker, of Sandusky.—Program.

Lorain County Medical Society met at the Newell Hotel, Elyria, on Tuesday evening, December 10. Following a five o'clock dinner, Dr. H. C. Stevens presented a paper on "The Pathology and Treatment of Burns", and Dr. W. E. Hart gave an interesting talk on "Why Should I Pay 1930 Dues? I Never Attend the Meetings". —Program.

Trumbull County Medical Society held its regular monthly meeting for November at the Warner Hotel, Warren, on Thursday, November 21, with an informal dinner at 6:30, followed by a short business session. The following scientific program was presented: "Glaucoma", by Dr. W. E. Bruner, Cleveland, with discussion by Dr. E. Goldcamp, Youngstown; "Endocarditis", by Dr. J. R. Bell, Cleveland.

The annual meeting of the Society was held at the Warner Hotel, Warren, on Thursday evening, December 19. Following a dinner at 6:30, annual reports were presented by officers, followed by election of officers for 1930. Dr. George Baxter, Associate Professor, Rush Medical College, Chicago, spoke on "The Sick Infant and the Intestinal Tract", and Dr. Leslie L. Bigelow, Assistant Professor of Surgery, Ohio State University College of Medicine and Chief of Staff, Children's Hospital, Columbus, spoke on "State Medicine in Europe and its Status in the United States".—Program.

Sixth District

Mahoning County Medical Society held its regular monthly meeting at the Youngstown Club, Tuesday, November 19. The visiting essayist, Dr. Howard Fox, of New York City, spoke on the subject of "Modern Treatment of Skin Diseases", with lantern slide demonstration. A clinic and demonstration on various skin diseases was held during the afternoon at the City Hospital A turkey dinner was served at the Club, followed by a social hour.—Program.

Portage County Medical Society, with wives of members, were guests of Dr. and Mrs. Jay D. Smith, at their home in Akron on November 6. The scientific program consisted of a talk on "The Mediastinum", by Dr. Smith, with interesting pictures by Dr. Shelby, of the People's Hospital. Socially, there were cards and prizes and a fine supper.

The December meeting of the Society was held at the office of Dr. J. H. Krape in Kent. Dr. R. F. Thaw, of Akron, gave an instructive address on "Crossed Eyes in Children", illustrated with pictures from little patients at the Children's Home. Election of officers for 1930 resulted as follows: President, Dr. W. B. Andrews; vice president, Dr. S. U. Sivon; secretary-treasurer, Dr. E. J. Widdecombe (re-elected); legislative committeeman and medical defense committeeman, Dr. G. J. Waggoner.—E. J. Widdecombe, Secretary.

Stark County Medical Society held its regular meeting in the Medical Library rooms, Canton, on Tuesday evening, December 10. The program was as follows: "Discussion of Congenital Exostosis with Presentation of a Case", by Dr. J. M. Van Dyke; "Management of Congenital Cataract", by Dr. George L. King, Jr., with discussion by Dr. J. F. Toot.—Program.

Seventh District

Tuscarawas County Medical Society met Thursday evening, November 14 at Twin City Hospital, for its regular monthly meeting, with twenty members present. A paper on "Appendicitis" was presented by Dr. D. W. Shumaker, and was followed by a discussion. The Society adopted a resolution pledging assistance to officers and management of the Twin City Hospital.—News Clipping.

Eighth District

Athens County Medical Society held its annual business meeting at the office of Dr. T. A. Copeland, Athens, on Monday evening, December 2. Twenty-five members enjoyed the splendid dinner served by Mrs. Copeland. A paper on "Complications and Sequelae of Respiratory Diseases", was presented by Dr. H. F. Downing, of Cincinnati. At the business session, the following officers were elected for 1930: President, Dr. C. C. Butt, vice president, Dr. H. T. Phillips; secretary-treasurer, Dr. T. A. Copeland, (reelected); correspondent for *The Journal*, Dr. A. L. Pritchard; legislative committeeman, Dr. J. L. Henry; medical defense committeeman, Dr. A. L. Pritchard; delegate to State Meeting, Dr. C. S. McDougall, and alternate, Dr. J. L. Henry. The secretary, Dr. Copeland, was elected in 1906, and has served continuously in that capacity.—A. L. Pritchard, Correspondent.

Fairfield County Medical Society met for a luncheon meeting at the Florentine, in Lancaster on Thursday, November 14, with thirty members present. Dr. J. A. Riebel, Columbus, presented an illustrated lecture on "Suture Material".—News Clipping.

Guernsey County Medical Society met in regular bi-monthly session at the Romance Restaurant, Cambridge, on Thursday, November 21. Dr. F. C. Huth read a paper on "Caesarean Section",

with all members present participating in the discussion which followed.

December 5—The regular bi-monthly session was held at the Romance Restaurant, with a paper on "Albuminuria" presented by Dr. E. F. Hunter.

December 20—Discussion of paper on "Albuminuria", presented by Dr. Hunter, at the meeting on December 5. Officers elected for 1930 are: President, Dr. C. L. Vorhies; vice president, Dr. O. R. Jones; secretary-treasurer, Dr. Gordon Lawyer; delegate to state meeting, Dr. B. A. Souders, and alternate, Dr. C. A. Craig; censor, Dr. C. C. Headley.—Reed Jones, Correspondent.

Muskingum County Academy of Medicine held its annual meeting on Wednesday evening, December 4 at the American Legion rooms, Zanesville. The program which was furnished by Columbus physicians, was as follows: "The General Management of Fractures", illustrated with lantern slides, by Dr. A. M. Steinfeld; "Abnormalities of the Oesophagus", with lantern slide demonstration, by Dr. John Dudley Dunham. Discussion by Dr. W. B. Morrison. Election resulted in a complete re-election of present officers, as follows: President, Dr. W. F. Sealover; vice president, Dr. L. E. Grimes; secretary-treasurer, and correspondent for *The Journal*, Dr. Beatrice T. Hagen; legislative committeeman, Dr. E. R. Brush; medical defense committeeman, Dr. J. C. Crossland; delegate to State Meeting, Dr. C. U. Hanna, and alternate, Dr. G. B. Trout.—Beatrice T. Hagen, Correspondent.

Perry County Medical Society held its regular meeting on Monday, November 18, at the Park Hotel, New Lexington. Drs. J. A. Riebel and F. S. Lott of Columbus were the speakers. "The Relation of Absorbable Sutures to Wound Healing" was the subject of Dr. Riebel's address, and Dr. Lott spoke on "Loose Bodies in the Knee'.—News Clipping.

Ninth District

Gallia County Medical Society held its regular meeting on Thursday evening, November 14 at Holzer Hospital, Gallipolis. In addition to discussion by members present, an interesting talk on Medical Economics was given by Mr. Greene, of Richmond, Indiana.—News Clipping.

Jackson County Medical Society met Tuesday evening, November 5 in the council chamber, Jackson. The visiting speaker was Dr. C. E. Holzer, Gallipolis, who discussed "Surgical Aspects of the Present-Day Practice".—News Clipping.

Scioto County—Hempstead Academy of Medicine held its annual banquet at Hotel Hurth, Portsmouth, on Monday evening, December 9th. Officers elected for 1930 at the business session are as follows: President, Dr. T. C. Crawford; vice president, Dr. A. R. Moore; secretary-treasurer, and correspondent for *The Journal*, Dr. Clyde M. Fitch (re-elected); legislative committeeman, Dr. J. S. Rardin; medical defense committeeman, Dr. A. L. Test; delegate to State Meeting, Dr. Gilbert Micklethwaite, and alternate, Dr. James W. Fitch.

At the business session of the regular meeting held Monday, November 11, Drs. H. L. Reinhard and Samuel K. Wallace were elected to membership in the Academy. Resolutions on the death of Dr. Martyn Taylor, who died October 22, were adopted.—Clyde W. Fitch, Secretary.

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

November 11—Program for regular weekly meeting held at Columbus Public Library: "Serial Study of Peptic Ulcers", by Dr. M. C. Sosman, of Peter Bent Brigham Hospital, Boston. Discussion opened by Dr. Andre Crotti and Dr. C W. McGavran. Attendance was about two hundred, including guests from adjoining county societies.

November 19—The Academy met with the Ohio Conference of Health Commissioners, at the Neil House, Columbus, Dr. C. O. Probst, presiding. "Human Rabies" was the subject presented by Dr. Samuel J. Hoffman of Cook County Hospital, Chicago. His address was supplemented with motion pictures of actual cases. "Animal Rabies" was discussed by Dr. Alvin Broerman of the Ohio Experimental Station. Governor Myers Y. Cooper spoke briefly assuring the health commissioners and the physicians and visitors of his interest in health conservation.

November 25—Report of committee appointed to prepare an amended constitution and by-laws was presented by the chairman, Dr. John B. Alcorn. The proposed amended constitution and by-laws were considered section by section and finally agreed upon. On motion by Dr. Platter, seconded by Dr. J. M. Thomas, the amended constitution and by-laws was adopted and will become effective on January 6, 1930.

December 2—Program: "The Coronary Arteries in Heart Disease" was the subject of an address by Dr. Joseph T. Wearn, Cleveland, Professor of Medicine, Western Reserve University School of Medicine. Discussion by Drs. Scott, Crotti, McCampbell, Freese, Baldwin, Van Buskirk, and Keil. Attendance, one hundred.

December 9—Program: "Brain Tumors", by Dr. Ernest Scott; "Lugol's Solution in Thyroid Disease", by Dr. Raymond A. Ramsey.

December 16—Annual D. Tod Gilliam Memorial Lecture, and annual dinner meeting of the Academy, at the Neil House, Columbus. The guest speaker was Dr. Emil Novak, of the Department of Gynecology of Johns Hopkins University College of Medicine. His subject was "Recent Advances in the Physiology of Menstruation".—Program.

RECENT COUNTY SOCIETY ELECTIONS

The following is a tabulation of officers reported for 1930, in addition to those counties including report of election with regular county society reports:

Darke County—President, Dr. I. H. Hawes, Arcanum; vice president, Dr. E. G. Husted, Greenville; secretary-treasurer, Dr. W. D. Bishop, Greenville; correspondent for *The Journal*, Dr. Robert Poling, Greenville; legislative committeeman, Dr. A. F. Sarver, Greenville; medical defense committeeman, Dr. O. P. Wolverton, Greenville; delegate to State Meeting, Dr. C. I. Stephens, Ansonia, and alternate, Dr. G. E. Gillette, Versailles.

Hamilton County—President, Dr. William Mithoefer; vice president, Dr. L. Howard Schriver; secretary, Dr. Edward King; treasurer, Dr. M. F. McCarthy; legislative committeeman, Dr. Symmes F. Oliver; delegates to State Meeting, Drs. E. O. Smith, Henry B. Freiberg, J. V. Greenebaum, Otto Seibert, Louis Feid, and Charles E. Kiely; alternates, Drs. Samuel Zielonka, Eslie Asbury, Symmes Oliver, J. Stark, E. O. Swartz, and R. L. Crudington.

Hancock County—President, Dr. T. A. Spitler, Findlay; vice president, Dr. A. E. King, Mt. Cory; secretary, Dr. J. H. Marshall, Findlay; treasurer, Dr. E. J. Thomas; medical defense committeeman, Dr. H. R. Wynn, Findlay; delegate to State Meeting, Dr. J. C. Tritch; alternate, Dr. J. M. Firmin.

Henry County—President, Dr. J. H. Fiser, Malinta; vice president, Dr. J. L. Brubaker; secretary-treasurer, Dr. F. M. Harrison, Napoleon; correspondent for *The Journal*, Dr. C. H. Skeen; legislative committeeman and medical defense committeeman, Dr. H. F. Rohrs; delegate to State Meeting, Dr. T. P. Delventhal, and alternate, Dr. B. J. George.

Knox County—President, Dr. W. H. Eastman, Fredericktown; vice president, Dr. I. S. Workman, Mt. Vernon; secretary-treasurer, Dr. Julius Shamansky, Mt. Vernon.

Lake County—President, Dr. C. H. Browning, Painesville; vice president, Dr. W. R. Carle, Perry; secretary-treasurer, Dr. F. J. Dineen, Painesville; legislative committeeman, Dr. G. O. Hedlund; delegate to State Meeting, Dr. V. N. Marsh, Painesville.

Lawrence County—President, Dr. George Hunter, Ironton; vice president, Dr. O. H. Henniger, Ironton; secretary-treasurer, Dr. Forest Stewart; legislative committee, Dr. T. H. Remy, chairman, Dr. O. H. Henniger, and Dr. W. W. Lynd; delegate to State Meeting, Dr. O. U. O'Neill, Ironton; alternate, Dr. H. S. Allen, Ironton.

Lorain County—President, Dr. W. S. Baldwin, Lorain; vice president, Dr. Zina Pitcher, Elyria; secretary-treasurer, Dr. W. S. Hart, Elyria; delegate to State Meeting, Dr. S. V. Burley, Lorain; alternate, Dr. E. J. Heinig, Vermilion.

Miami County—President, Dr. J. E. Murray, Piqua; vice president, Dr. M. I. Miler, Troy; secretary-treasurer, Dr. G. A. Woodhouse, Pleasant Hill; legislative committeeman, Dr. G. E. McCullough, Troy; delegate to State Meeting, Dr. Gainor Jennings, West Milton; alternate, Dr. John T. Quirk, Piqua.

Montgomery County—President, Dr. A. W. Carley; first vice president, Dr. H. H. Herman; second vice president, Dr. A. G. Farmer; executive secretary, Miss Mildred E. Jeffrey; correspondent for *The Journal*, Dr. H. V. Dutrow; legislative committeeman, and medical defense committeeman, Dr. Wester S. Smith; delegates to State Meeting, Drs. E. M. Huston, A. O. Peters, and W. B. Bryant; alternates, Drs. H. H. Hatcher, F. K. Kislig, and H. F. Koppe.

Morrow County—President, Dr. F. E. Thompson, Marengo; vice president, Dr. C. S. Jackson, Mt. Gilead; secretary, Dr. Todd Caris, Mt. Gilead; treasurer, and legislative committeeman, Dr. R. L. Pierce, Mt. Gilead; medical defense committeeman, Dr. C. E. Neal, Cardington; delegate to State Meeting, Dr. C. S. Jackson, and alternate, Dr. Todd Caris.

Pike County—President, Dr. O. R. Eylar, Waverly; vice president, Dr. Paul Jones, Stockdale; secretary-treasurer, Dr. L. E. Wills, Waverly; correspondent for *The Journal*, and medical defense committeeman, Dr. I. P. Seiler, Piketon; legislative committeeman, Dr. O. R. Eylar; delegate to State Meeting, Dr. R. M. Andre, Waverly; alternate, Dr. L. E. Wills, Waverly.

Ross County—President, Dr. John Franklin, Chillicothe; vice president, Dr. Glen Nisley, Chillicothe; secretary-treasurer and correspondent for *The Journal*, Dr. W. C. Breth, Chillicothe; legislative committeeman and medical defense committeeman, Dr. H. R. Brown, Chillicothe; delegate to State Meeting, Dr. O. P. Tatman and alternate, Dr. A. E. Merkle, Chillicothe.

Summit County—President, Dr. R. E. Amos, Akron; president-elect, Dr. C. C. Pinkerton, Akron; secretary-treasurer and correspondent for *The Journal*, Dr. A. S. McCormick, Akron; delegates to State Meeting, Drs. H. S. Davidson, C. R. Steinke, and W. A. Hoyt, Akron.

Union County—President, Dr. F. M. Wurtsbaugh, Richwood; vice president, Dr. P. D. Longbrake, Marysville; secretary-treasurer, Dr. H. C. Duke, Richwood; correspondent for *The Journal*, Dr. Angus MacIvor, Marysville; legislative committeeman, Dr. H. C. Duke; medical defense committeeman, Dr. J. L. Boylan, Milford Center; delegate to State Meeting, Dr. J. D. Boylan, Milford Center; and alternate, Dr. Angus MacIvor, Marysville.

NEWS NOTES of OHIO

Columbus—Dr. C. L. Cummer, Cleveland, councilor of the Fifth District of the Ohio State Medical Association, was one of the speakers at the Sixty-Fourth Annual Meeting of the Ohio State Dental Society, held in Columbus, December 3, 4 and 5. Dr. Cummer, in discussing the topic, "The Recognition of Certain Important Diseases as Manifested in the Mouth", considered principally syphilis, malignancy and Vincent's angina, describing the lesions of each and discussing the differential diagnosis. He stressed the importance of recognition by the dentist. Lantern slides were used throughout the address.

Toledo—William J. Burns has resigned as executive secretary of the Toledo Academy of Medicine and has accepted a similar position with the Wayne County Medical Society of Michigan, which includes the city of Detroit. Mr. Burns will assume his new duties at Detroit in January. His successor has not been appointed.

Ravenna—Dr. J. R. Turner, Kent, has been appointed coroner of Portage County, succeeding Dr. R. D. Worden, Ravenna.

Willard—Dr. Harry G. Blaine celebrated his seventy-first birthday recently with a dinner party at his home.

Columbus—Dr. Andre Crotti, chief of staff at White Cross Hospital and a member of the faculty at Ohio State University, College of Medicine, spoke before the fourth annual clinic of the Highland Park Physicians' Club at the Highland Park (Michigan) Hospital.

Cleveland—On February 4, members of the Cleveland Academy of Medicine will go to Toronto, Canada, returning the recent visit of Toronto physicians to Cleveland.

Cleveland—Members of the Cleveland Academy of Medicine have been invited to attend a special dinner meeting of the Cleveland Dental Society, January 6.

Cleveland—Dr. H. E. Mitchell is taking postgraduate work in diseases of the nose, ear and throat at Vienna.

Cleveland—Dr. C. L. McDonald has returned from a three months trip abroad.

Cleveland—Dr. Alan D. Finlayson, who has been spending a year in England and Germany is expected home shortly after the first of the year.

Cleveland—The Cleveland State Hospital has issued a desire to get in touch with young physicians who wish to take resident training in psychiatry.

Cleveland—Dr. R. Paul Motto has returned from Amsterdam where he attended the International Ophthalmological Conference.

Canton—Dr. Floyd C. Hendrickson and Dr. Anna Hendrickson, both of Canton, have accepted positions at Bellevue Hospital, New York. The former is on the resident staff in urology and the latter has a position in the department of roentgenology.

Norwalk—Dr. John A. Sipher was badly cut and bruised about the face when he tripped over a child's plaything and fell at his home.

Columbus—Dr. R. B. Drury has given a scholarship to Capital University, to be awarded each year to the freshman bearing the highest school record.

Akron—A promoter, who sold a large amount of advertising space to Akron merchants and obtained funds from many physicians and surgeons for insertion of their names in a proposed "Physicians, Surgeons and Nurses Directory", is being sought by the authorities.

Cleveland—Dr. Robert J. May, chief of the *X*-ray department at St. Luke's Hospital, was installed as president of the Radiological Society of North America at its recent annual meeting at Toronto, Canada.

Lakewood—The following seven physicians have been named to act in an advisory capacity in the construction of Lakewood's new $1,000,000 municipal hospital: Drs. Lee Graber, Homer Ballard, A. G. Cranch, Otto Goehle, E. G. Saunders, D. M. Spicer and C. W. Wille.

Cleveland—Following an experiment staged at the Cleveland Airport in which a small girl was taken for a ride in a stunting airplane in an effort to restore her hearing, the committee on health education of the Cleveland Academy of Medicine issued a bulletin denouncing such procedures. The committee cited the opinions of a number of prominent Cleveland eye, ear, nose and throat specialists, all of whom declared such treatment is useless and that it merely tends to change the pressure on the ear drum. Civic leaders have denounced the affair as advertising ballyhoo.

Cleveland—Drs. W. G. Stern and J. L. Bubis were guest speakers at the annual meeting of the Highland Park Medical Society, Detroit, December 5. Dr. Bubis spoke on "Physical and Economical Advantages of Gynoplastic Repairs After Childbirth" and Dr. Stern's topic was "The Conservative Treatment of Compound Fractures."

DOCTOR!

You are Cordially Invited to Attend the

46TH ANNUAL CONVENTION

—of—

THE TRI-STATES MEDICAL ASSOCIATION OF MISSISSIPPI, ARKANSAS, TENNESSEE

—at—

HOTEL PEABODY, MEMPHIS, TENN.

January 14, 15, 16th, 1930

READ THIS LIST OF THOSE WHO WILL DELIVER ADDRESSES AND MAKE YOUR HOTEL RESERVATIONS AT ONCE, OR, BETTER, ASK THE SECRETARY TO DO IT FOR YOU

Dr. George R. Minot, Prof. Med., Harvard Univ., Boston, Mass.
Dr. Robert C. Coffee, Prof. Surg., Univ. Oregon, Portland, Oregon.
Dr. Michael M. Davis, Dir. Med. Services, Rosenwald Fund., Chicago, Ill.
Dr. Frank H. Lahey, Surgery, Boston, Mass.
Dr. W. McKim Marriott, Dean and Prof. Ped., Wash. Univ., St. Louis, Mo.
Dr. Wells P. Eagleton, Surgery, Newark, New Jersey.
Dr. John A. Killian, Prof. Biochem, N. Y. Post Grad. School, New York, New York.
Dr. William B. Castle, Inst. Med., Harvard Univ., Boston, Mass.
Dr. Hermon C. Bumpus, Assoc. Prof. Urol., Univ. Minn. Grad. School, Rochester, Minn.
Dr. John Whitridge Williams, Prof. Obst., Johns Hopkins Univ., Baltimore, Md.
Dr. William R. MacAusland, Orthopedics, Boston, Mass.
Dr. Emil Novak, Gynecology, Baltimore, Md.
Dr. Charles C. Bass, Dean and Prof. Exper. Med., Tulane Univ., New Orleans, La.
Dr. Walter B. Lancaster, Ophthalm., Boston, Mass.
Dr. Ralph H. Major, Prof. Med., Univ. Kansas, Kansas City, Mo.
Dr. Henry A. Christian, Prof. Theo. and Pract., Harvard Univ., Boston, Mass.
Dr. Fred W. Rankin, Ass't Prof. Surg., Univ. Minn. Grad. School, Rochester, Minn.
Dr. Harold L. Amoss, Assoc. Prof. Med., Johns Hopkins Univ., Baltimore, Md.

Others will be added later. Programs will be mailed about January 1st. Write for one.

DR. A. F. COOPER, Sec'y-Treas.,
Bank of Commerce Building, Memphis, Tenn.

Columbus—Dr. I. B. Harris, Columbus surgeon, has resigned as a member of the Columbus Board of Health.

Columbus—The Columbus General Practitioners' Society has voted to affiliate with the Columbus Academy of Medicine and become the medical section of the Academy.

Lancaster—Dr. C. A. Barrow was bruised and cut when his automobile and a truck collided near Lancaster.

Cincinnati—Dr. Louis A. Lurie, director of the Psychopathic Institute of the Jewish Hospital, has been asked by Secretary of Interior Ray Lyman Wilbur, to serve on one of the sub-committees making surveys for the White House Conference on Child Health and Protection.

Greenville—Dr. A. F. Sarver has been named a member of the rehabilitation committee of the Ohio American Legion.

Cincinnati—At a recent get-to-gether conference of district physicians in the City Health Department, the following papers were read: "The Medical Aspect of Heart Disease in School Children", Dr. B. A. Schwartz; "Diphtheria", Dr. J. S. Mills, and "A School Report", Dr. M. A. Elstein.

Cleveland—Dr. Clarke Sullivan, Dayton, was elected president of the Ohio State Homeopathic Medical Society at its recent annual meeting here.

Cleveland—Dr. Claude S. Beck, assistant professor of surgery at the School of Medicine, Western Reserve University, has been elected to membership by the Society of Clinical Surgery.

Cleveland—Land for the new School of Nursing building of Western Reserve University has been purchased at 11206 Euclid Avenue, it has been announced.

Sandusky—Dr. Lyle S. Hill, chief of the staff of Good Samaritan Hospital, delivered the nurses' graduation address at exercises held recently at the hospital.

Columbus—Dr. Paul R. Bauman, Columbus, and Miss Helen Miller, Greenville, were married recently at the home of Dr. Bauman's mother, Mrs. Pauline R. Bauman, Columbus. Dr. Bauman is a graduate of the College of Medicine, University of Cincinnati.

Piqua—Dr. L. D. Trowbridge, one of a party of four on a hunting trip in Mexico, had three ribs fractured in an automobile accident, according to word received by his family.

Marion—Dr. Auguste Rhu, veteran Marion physician, was one of the guests of honor at the Old Timers' party given by the local Y.M.C.A.

Dayton—Management of the Dayton-Biltmore Hotel has announced the appointment of Dr. W. C. Breidenbach as house physician.

Piqua—Dr. John F. Beachler delivered an illustrated talk on "Diseases of the Gall Bladder and the Kidneys" before the local Lions Club.

Alliance—Forty physicians and dentists and their wives from Alliance, Sebring, Damascus, and vicinity, attended a get-to-gether party recently at the Alliance Country Club.

Springfield—Dr. Paul R. Minich addressed the local Roosevelt Parent-Teacher Association on "Health and Dress".

Lancaster—Dr. Howard E. Boucher, Columbus, recently addressed the local Kiwanis Club.

Toronto—Offices have been opened here by Dr. L. J. Kerschgen, a graduate last June from the College of Medicine, Ohio State University.

Columbus—Dr. W. S. Hart, Pomeroy, has been appointed a medical examiner for the State Industrial Commission.

Hamilton—Dr. Walter F. Coakley has returned from post-graduate work at Washington University, St. Louis, and has opened offices for general practice. He received his medical degree from Ohio State University.

Cincinnati—Dr. Robert D. Maddox has returned to Cincinnati after 12 years of government service.

Cincinnati—Dr. Maurice P. Cooper, a member of the 1929 graduating class of the College of Medicine, University of Cincinnati, has opened offices at Dayton.

Uhrichsville—Dr. F. A. Bower is recovering from a gunshot wound in his right leg below the knee, received accidentally while hunting rabbits.

Xenia—Wilberforce College ranks second in a group of negro schools giving premedical college work acceptable to the Council on Medical Education and Hospitals of the A.M.A., it has been announced.

Canton—Dr. Glen E. Macklem, who has just completed post graduate work in the East, has opened a new suite of offices in the Brant Building, including a clinical laboratory. He will limit his practice to gastroenterology.

Cincinnati—A testimonial dinner was given Dr. Albert P. Mathews, a member of the faculty of the College of Medicine, University of Cincinnati, November 26, in honor of his completion of 25 years as a professor of biochemistry. Among those prosent was Dr. Basil C. H. Harvey, dean of the Medical School, University of Chicago, where Dr. Mathews began his professorship.

Columbus—Dr. and Mrs. Roy E. Krigbaum have returned from a trip abroad.

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PROMPT AND FULL REPORT

Cleveland—Dr. L. Kacso sailed recently for Europe to visit several eye clinics. He expects to return to Cleveland in March.

Wooster—Announcement was made recently of the marriage on June 26, 1929, of Miss Mildred Shamp and Dr. William Blount Turner.

Cleveland—Dr. Frank P. Corrigan, director of Surgery at St. Alexis Hospital, gave an illustrated talk on South American Medicine and Surgery before members of the Gratiot, Isabel and Clair Counties' Medical Society, St. Louis, Michigan, on November 14.

Columbus—Drs. E. D. Helfrich and Morgan C. Davies attended the annual meeting of the American Academy of Ophthalmology and Oto-Laryngology at Atlantic City recently.

Bellaire—Members of Belmont County Medical Society were invited to attend a meeting of the Ohio County (West Virginia) Medical Society at Wheeling on December 6. Dr. L. J. Karnosh, Cleveland, addressed the Society on "Constitution in Mental Disease."

AGE AND THE MARRIAGE GAMBLE

Until the age of 25 years, a girl has everything in her favor insofar as matrimony is concerned but after that age her chances of marriage decrease with each birthday, according to figures announced by the Metropolitan Life Insurance Company.

By the time a woman is 30, the odds are two to one against her marriage within the next 10 years, the insurance company's statistics show.

The statistics also reveal that marriage results from youth on the part of the woman and income on the part of the man. A man at 25 is just beginning to become a matrimonial prospect, the report says, and his chances of finding a wife are less than even—41.1 per cent—up to that time. But after he reaches his 25th birthday and until he is 35 years of age, he has three chances to one of marrying.

Graphs show that a girl of 15 has exactly as good a chance of getting married within the next three years as a woman of 30 despite the fact that the latter has had opportunity to acquire a college education. Each has 17 per cent, or one chance in six.

Plans for a new medical center to consist of 13 buildings and cover the major portion of three blocks along the East River, near the Rockefeller Institute, New York City, have been drafted by authorities of the New York Hospital and the Cornell Medical College. The cost would be approximately $16,000,000. Development of the center is being undertaken by a board consisting of J. P. Morgan, Edward W. Sheldon, William Woodward, Frank L. Polk, Dr. Livingston Farrand, J. Du Pratt White and Dr. Walter L. Niles.

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Losses Through Auto Accidents

How the hospital and the doctor has a financial interest in community safety is pointed out in a recent editorial in the *National Safety News* which cites that one item of the nation's automobile accident bill is the $11,500,000 which hospitals are unable to collect for service to victims of auto crashes. *The News* also is of the opinion that probably physicians in private practice would report a similar experience.

"This would seem to dispel the illusion that accidents swell the incomes of hospitals, doctors and undertakers", the *Safety News* declares. "Somebody must pay the bill, whether it be the victim, the hospital, the physician, or the county. Everyone has a financial interest in community safety."

Many physicians undoubtedly could offer testimonials backing up the safety journal in its contention that a large percentage of their bills for emergency service in accidents is uncollectable. The physician for economic and financial reasons, as well as from the standpoint of humanitarianism and public welfare, ought to be a booster for "safety first" in all fields of activity.

A medical handbook for merchant seamen and containing information as to diagnosis and treatment of sick and injured persons abroad ships without the services of a physician has been issued by the United States Public Health Service.

Assignments and Changes in College of of Medicine, Cincinnati

Numerous appointments and assignments in the College of Medicine, University of Cincinnati, and its affiliated institutions, were made at a recent meeting of the Board of Directors of the University.

Dr. A. Graeme Mitchell, professor of pediatrics, was appointed chief of the medical staff at Children's Hospital and Dr. Alfred Friedlander, professor of medicine, was named chief of the attending staff at the new Chronic Disease Hospital, both institutions being under the affiliated supervision of the Board of Directors.

Dr. Charles E. Kiely, assistant clinical professor of neurology was appointed acting head of the department of neuro-psychiatry, filling the place of the late Dr. H. H. Hoppe.

Dr. Julien Benjamin, assistant professor of medicine, was named director of the Out-Patient Dispensary, filling the vacancy created by the death of Dr. B. K. Rachford.

Other appointments authorized were:

Children's Hospital—Dr. Frank H. Lamb, assistant chief of staff and director of pediatric service; Dr. Walter R. Griess, director of surgical service; Dr. Walter E. Murphy, director of oto-laryngological service; Dr. Albert H. Freiberg, director of orthopedic service; Dr. Elmore B. Tauber, director of dermatological service; Dr. A. W. Foertmeyer, acting director of neurological service; Dr. Clarence King, director of ophthalmological service; Dr. Henry T. Smith, director of dental service; Dr. William M. Doughty, director of *X*-ray service; Dr. William B. Wherry, director of bacteriological service; Dr. Richard S. Austin, director of pathological service; Dr. Stanley E. Dorst, director of clinical laboratories.

Chronic Disease Hospital—Dr. W. DeW. Andrus, attending surgeon; Dr. A. R. Vonderahe, attending neuropsychiatrist; Dr. H. B. Weiss, attending internist; Dr. Joseph A. Freiberg, attending orthopedic surgeon; Dr. A. W. Wendel, attending urologist; Dr. D. T. Vail, Jr., attending ophthalmologist; Dr. Harris H. Vail, attending oto-laryngologist; Dr. H. L. Claassen, attending dermatologist; Dr. Paul Sudhoff, resident medical director.

College of Medicine—Drs. William Roach and J. F. Bateman, clinicians in the neuro-psychiatric division of the Out-Patient Dispensary; Lewis Gilson, instructor in biochemistry; Dr. Ben L. Bryant, instructor in physiology; Dr. W. E. Brown, associate professor of preventive medicine.

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HOSPITAL NOTES

Work on new hospitals and on additions to others in a number of Ohio communities will be started soon as a result of the action of voters at the November election.

A $100,000 county hospital will be erected in Fayette County following the approval of bond issue for that amount by a large majority of the voters of that county. A 35-bed institution is being planned. Many requests have been received from individuals and organizations to equip and furnish a room in the new hospital. There will be some delay in starting work on the structure due to the failure of the County Board of Elections to publish a proclamation from the sheriff, announcing the election which has thrown the question into the courts for settlement.

Lakewood voters approved a $1,000,000 bond issue for construction of a city hospital for which a strenuous campaign had been waged by civic and business organizations. The present Lakewood Hospital is to be donated to the city by the present board of trustees as a start for the new institution. It has not been decided whether to erect a new building or build additions to the present structure. A 200-bed institution is contemplated.

A tax levy of three-fourths of one mill, effective for five years, approved by the East Liverpool voters, will provide funds for the erection of a four-story addition to the present East Liverlool City Hospital and for re-equipping of parts of the present building.

A campaign for funds for improvement and enlargement of the Champaign County Hospital was successful when voters approved a tax levy which will provide at least $25,000 for the work.

A bond issue of $425,000 for the erection of a county tuberculosis hospital near Lorain won by a large vote.

A proposal for the issuance of $250,000 in bonds for an addition to the Mansfield General Hospital was defeated by a narrow margin.

Ashtabula voters rejected a proposal for a one-third of a mill tax levy to provide operating funds for the Ashtabula General Hospital.

—The following additions and promotions at Deaconess Hospital, Cincinnati, have been announced: Dr Charles E. Hauser, from junior to senior in the division of gynecology; Dr. John D. Miller, consultant in this division; Dr. Dudley Palmer and Dr. Louis Feid, Jr., seniors in the division of general surgery; Dr. A. W. Nelson, senior in the division of genito urinary; Dr. A. K. Joerling, junior in the division of medicine.

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The Cleveland Clinic announces the appointment of William James Gardner, M.D., of the University of Pennsylvania, as Head of the Department of Neurosurgery, the position made vacant by the death of Dr. Charles E. Locke, Jr.

—A new moving picture film, depicting living cells resembling those of which the human body is composed in the course of growth, movement and multiplication, has been purchased by the American Society for the Control of Cancer. The film is the work of Dr. R. G. Canti, research worker of Saint Bartholomew's Hospital, London, England.

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—Willard Municipal Hospital is expected to be completed by February 1. The Baltimore and Ohio Railroad has contributed $5000 toward the purchase of modern equipment for the $60,000 institution. Additional contributions toward a $20.000 fund for equipment are being solicited.

—More than 100 physicians from the staff of St. Vincent's Hospital, Toledo, were guests November 21 of the staff of Mt. Sinai Hospital, Cleveland.

—Raising of funds for furnishing and decorating the new $40,000 addition to Greenville's City Hospital is under way. Completion of the new wing is promised shortly after the first of the year.

—The intensive campaign waged at Cincinnati for a $1,500,000 building fund for the Jewish Hospital went "over the top" when contributions totaling $1,508,694.53 were reported.

—Prentiss Auditorium, situated in the new east wing of St. Luke's Hospital, Cleveland, was dedicated November 10. The entire wing is the gift of Francis F. Prentiss, president of the Board of Trustees.

—An intensive county-wide campaign for $100,000 with which to improve and enlarge Jane M. Case Hospital, Delaware, is underway.

—Threatened closing of the Twin City Hospital, Uhrichsville, was believed averted when the Tuscarawas County Medical Society passed a resolution pledging its good will and support to the institution which serves Uhrichsville, Dennison and community.

—Bids on the new Lucas County Infirmary hospital, for which bonds totaling $950,000 have been voted, will be opened by the county commissioners, January 6.

—A charity ward, financed largely by the City Union of King's Daughters, has been opened at the Marion City Hospital.

—About 100 surgeons of Ceneral Ohio attended the semi-annual clinic at White Cross Hospital, Columbus, conducted by Dr. John B. Deaver, Jefferson Hospital, Philadelphia. Dr. Andre Crotti, chief of staff, presided at the sessions of the all day clinic.

—Work on the contagious disease hospital to be erected near the Ashtabula General Hospital probably will be started within 60 days. City Council has passed an ordinance authorizing erection of the building, funds for which have been raised by a one-third of a mill tax levy for the past three years.

—The Division of Factory and Workshops Inspection of the State Department of Industrial Relations has announced that it has been notified of the erection of fireproof *X*-ray film vaults at the following institutions: City Hospital, Bellaire; Central Clinic Hospital, Salem; Mt. Carmel

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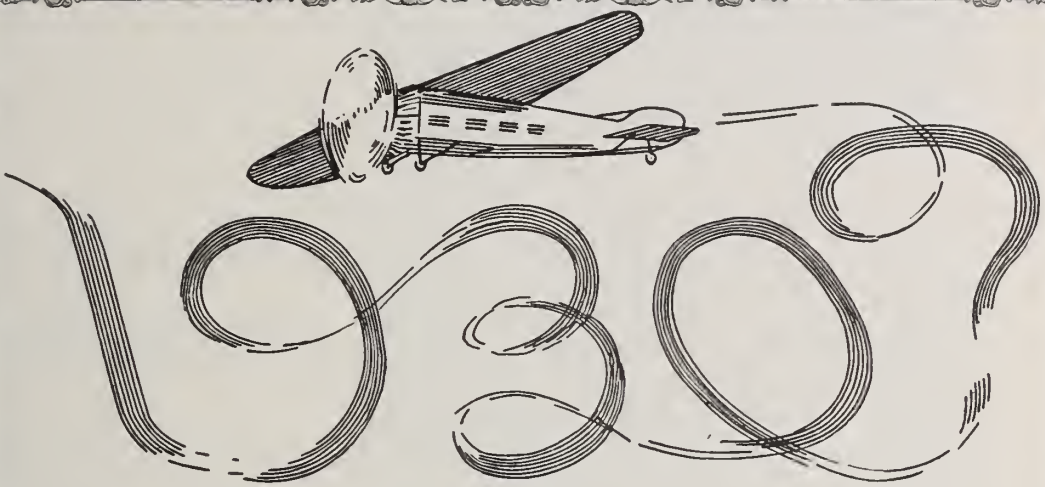


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Hospital, Columbus; Western Reserve University, and National Laboratories Co., Lorain.

—Plans for remodeling the Longview State Hospital, Cincinnati, to provide additional sleeping and living quarters are being drawn by State Architect T. R. Ridley. The work will cost $20,000. Plans are also being prepared for a $100,000 addition, including a new main dining room, kitchen, attendants' dining room, bake shop and cold storage room, at the Cleveland State Hospital.

Building Commissioner William D. Guion of Cleveland has been asked to grant a permit for the erection of a $250,000 nurses' home adjoining the north side of St. Alexis Hospital, Cleveland. The proposed structure would house 100 nurses and provide classrooms, dining hall and a dormitory.

Community hospital districts, providing doctors and medical facilities for rural sections of the province of Saskatchewan, Canada, are "functioning satisfactorily and may furnish valuable suggestions for similar programs in the United States," according to a bulletin issued by the Children's Bureau of the U. S. Department of Labor.

Under the Canadian system, it was explained, resident taxpayers of several districts join in erecting a hospital adequate for the needs of the community and for the purpose of attempting to keep physicians in rural areas. The system has been in effect eight years.

A hospital board is organized, on which each municipality is represented by one to three members, according to the amount of assessment of the municipality. The hospital is built, equipped, maintained, and managed by the resident taxpayers of the cooperating districts through their representatives on the board, which becomes a body corporate.

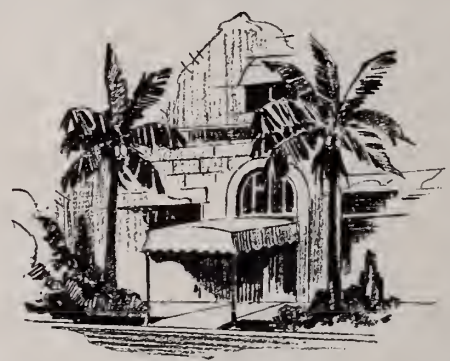
There are 16 of these small hospitals in the province of Saskatchewan. In 1915 only 1 birth in every 13 took place in a hospital; now 1 in every 6 takes place in a hospital, the bulletin points out.

—Plans are being made for the dedication of Fostoria's new $75,000 City Hospital shortly after the first of the year. It has a capacity of 12 beds.

—The Polyclinic Hospital Association, now operating as the Hospital Clinic at 8808 Euclid Avenue, Cleveland, will occupy its new home in the former St. Luke's Hospital building on January 1. The staff will include: Dr. A. F. Spurney, president; Dr. H. A. Schlink, vice president; Dr. Frank J. Vokoun, secretary; Dr. U. M. Bachman, treasurer, and the following directors: Drs. Arthur Stotter, H. Schur, John Godman, J. T. Vitkus, C. K. Teter and W. H. Kelly.

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Gynecology and Obstetrics

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Urology

ARTHUR H. WEILAND, M.D., F.A.C.S.
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BASCOM H. PALMER, M.D., F.A.C.S.
Ophthalmology-Otolaryngology

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E. STERLING NICHOL, M.D.
Cardio-vascular Diseases

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Gastro-enterology

GERARD RAAP, M.D.
Roentgenology-Radium Therapy

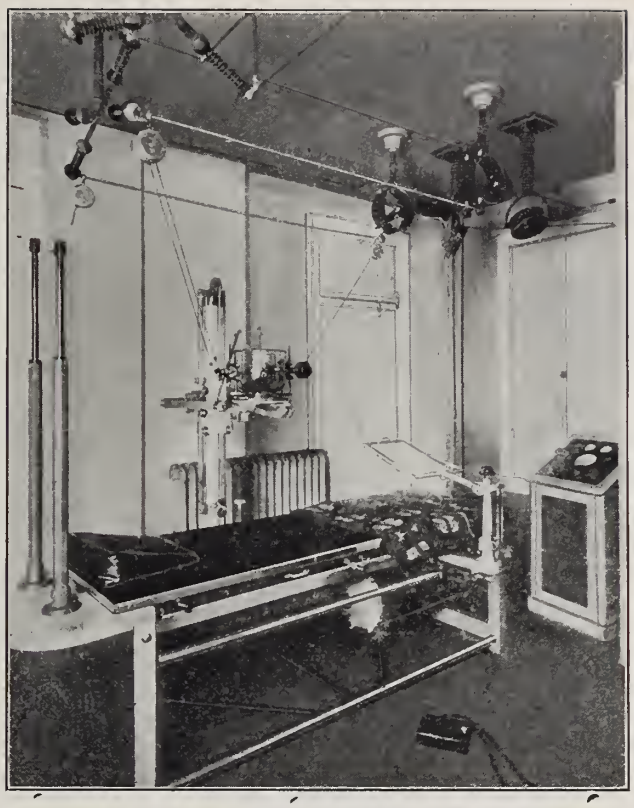
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PUBLIC HEALTH NOTES

—The death of Dr. J. A. Frank, head of the division of hygiene, State Department of Health, on December 5, was the third within the past 14 months among divisional chiefs at the state department. Fred Berry, chief of the laboratory, died in October, 1928, and Dr. C. P. Robbins, chief of the division of communicable diseases, died last May 4. Dr. Frank joined the State Department of Health in 1918 as assistant epidemiologist. In 1920 he became head of the division of social diseases and in 1921 was appointed chief of the bureau of tuberculosis. He was made head of the division of hygiene in 1926.

—A course in first-aid instruction inaugurated by Dr. W. H. Peters Cincinnati health commissioner, has become quite popular among members of the Cincinnati Fire Department. At a recent examination, 104 of the 107 fire department officers enrolled passed with a satisfactory grade. Of the 62 who took the examination for the Red Cross senior certificate, 58 qualified. Modified courses are also being given to policemen.

—This winter promises to be an active measles season, according to a prediction made in a recent communicable disease survey of the State Department of Health. A pronounced rise in the disease was registered during the last half of November, the number of new cases reported numbering 638 or more than twice the average expectancy.

Smallpox also is on the increase and the need for vaccination campaigns is evident, the statement pointed out. The morbidity rate for the first 11 months of 1929 was 33 per 100,000 in the cities of the state and 50 in the general health districts. The number of new cases of smallpox reported during the last half of November totaled 263, the average expectancy being 152. Diphtheria, scarlet fever, typhoid fever and whooping cough showed slight decreases during the last half of November. Small increases were noted in chickenpox and infantile paralysis.

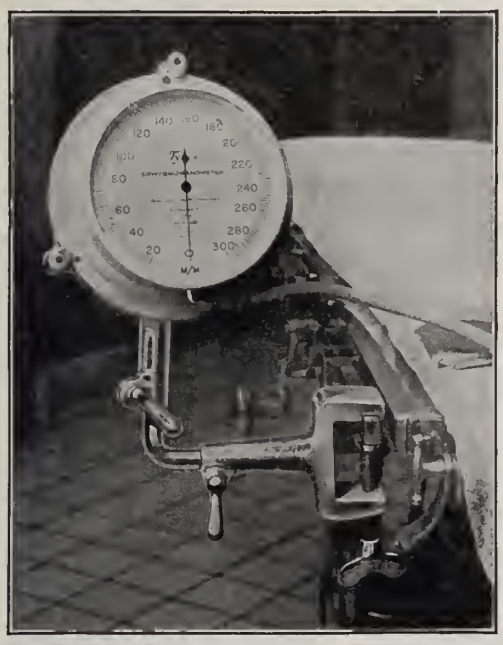
—Mortality in the larger cities is higher than in the less closely inhabited districts, using the states of New York and Utah for a comparison, according to a recent statement issued by Willard Smith, chief of the division of vital statistics, U. S. Census Bureau. The annual rate per 100,000 in New York in 1928 was 1312 as compared with 962 at the same rate in Utah, he said. The accident rate in both states was the same. It was pointed out that the cities, however, are making more progress than rural districts in sanitation.

—The Massachusetts Department of Health is sponsoring a compulsory vaccination bill which will compel all infants before the end of the first year to be vaccinated and make mandatory revaccination early in school life, according to Dr. George H. Bigelow, state health commissioner. It was pointed out that shortcomings in the present law have resulted in more smallpox cases during 1928 than in any year since 1903.

—The Cincinnati Board of Health is waging a campaign for legislation banning marketing of anything but pasteurized milk in the Queen City. A very large percentage of the milk now used there is pasteurized.

—Summit County commissioners are discussing the erection of an addition to the County Jail where prisoners may be given physical examinations and receive treatment for acute, contagious and infectious diseases.

—A series of Saturday morning meetings at which various public health subjects will be discussed has been arranged by nurses of the Cincinnati Public Health Federation. Some of the subjects to be discussed are: January 4, "Social Case Work in Tuberculosis," Rhoda O'Meara; January 18, "Tuberculosis and the Negro," Max Senior; February 1, "The Private Physician," Dr. J. L. Teuchter; February 15, "Tuberculosis in Children," Dr. A. Graeme Mitchell.



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March 1, "Finding Jobs for the Tuberculous," Miss Ella M. Burnett; March 15, "Case Finding," Anna M. Drake; March 29, "Public Health Education," Bleecker Marquette; April 12, "National and State Tuberculosis Associations," Dr. R. G. DeVoist, and April 26, "The Tuberculosis Program of the Cincinnati Health Department," Dr. William H. Peters.

—Instruction in sex hygiene is to be given at Oberlin College next year, according to Dr. Ernest H. Wilkins, president of the college. "It is probable", said Dr. Wilkins, "that the instruction will be merely an enlargement of the hygiene courses already offered in men's and women's classes at the college. The plan is no innovation. We are merely following the example of a number of other higher educational institutions which have already instituted such instruction." The college also is considering offering studies in family relations.

—Bond issues for water works and sewerage projects were approved in the last election by voters of a number of Ohio cities and villages. The following tabulation on the bond issues that carried was announced recently by the State Department of Health:

Water Supplies—

Cygnet	$ 16,000
Delta	100,000
Genoa	46,000
Killbuck	35,000
Ohio City	25,000
St. Paris	63,000
Sardinia	34,000
Swanton	20,000

Sewerage and sewage treatment—

Cuyahoga Falls	$ 60,000
Geneva-on-the-Lake	27,730
Lima	970,000
Norwalk	475,000
Oak Hill	50,000
Rocky River	90,000
Upper Sandusky	25,000

—Surgeon General H. S. Cumming of the U. S. Public Health Service has submitted to Congress a report which summarizes the health conditions throughout the world during the 1928-1929 fiscal year. This report indicates that one of the important public health duties of the Federal Government is the prevention of the introduction and spread of infectious diseases in the United States from foreign countries. A constant interchange of sanitary information with other nations of the world was in effect.

There occurred in the winter of 1928-29 an epidemic of influenza which, although mild as compared with the epidemic of 1920 and the pandemic of 1918-19, reached a large part of the countries for which mortality records are available. The epidemic reached its peak in most European countries in February, 1929, one or two months later than in most of the states of the United States.

The attack rates varied widely from one region to another. In some places the general death rate (all causes) was scarcely affected; in others the maximum weekly death rates were very heavy. These death rates exceeded somewhat the highest rates in American cities. In England and Wales the death rates were the highest since the 1918 pandemic, but in the Soviet States, Austria, Hungary and Switzerland the recent peaks were considerably below those of the epidemic which visited certain European areas in 1927.

Cerebrospinal meningitis was unusually high in the United States during the last half of 1928 and especially during the early part of 1929. Up to the beginning of 1929 there was no undue prevalence of the disease in European countries, but in April and May of 1929 there was more than the normal number of deaths from this disease in England and Wales, Scotland, Germany and Italy.

There was in the fall of 1928 an epidemic of plague in India, particularly in the Bombay Presidency, which was the most severe since 1923. A considerable number of cases of cholera occurred in India during the year.

Yellow fever was reported in Brazil during the year, a severe outbreak occurring at Rio de Janeiro. At the close of the fiscal year the outbreak appeared to be under control, but at that time the disease was reported in the interior of Colombia.

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—Among those who spoke at the Cleveland League of Women Voters' Social Hygiene Institute were: Bascom Johnson, director of the division of legal and protective measures, American Social Hygiene Association, New York City; Charles E. Miner, Chicago, president of the Social Service Forum of Chicago; Dr. Carl A. Wilzbach, executive secretary of the Cincinnati Social Hygiene Society and H. H. Griswold, state welfare director.

—Dr. Paul F. Orr has resigned as health commissioner of Toledo. His successor has not been chosen.

Safety Congress in Columbus, Jan. 14 to 16

A tentative program for the third All-Ohio Safety Congress to be held in Columbus, January 14, 15 and 16, has been drafted under the direction of Thomas P. Kearns, head of the division of safety and hygiene of the State Department of Industrial Relations.

Governor Cooper and Mayor Thomas of Columbus will welcome delegates at the opening session of the Congress, January 14. Wellington T. Leonard, chairman of the State Industrial Commission, will introduce the out-of-state speakers at the first session, among whom will be C. E. Pettibone, Boston, president of the National Safety Council, and Isaiah Hale, Topeka, safety superintendent of the Santa Fe Railroad. A dinner meeting for employers and plant executives will be held the evening of January 14, at which L. B. Webster, secretary of the Ohio Manufacturers' Association, will preside as toastmaster. The principal speaker will be C. A. Sundberg of Springfield.

The session of January 15 will be presided over by L. E. Nyswander, of the State Industrial Commission, and talks will be made by Miss Frances Perkins, industrial commissioner of New York State, and W. T. Black, director of the State Department of Industrial Relations of Ohio.

Thomas M. Gregory, of the State Industrial Commission, will be chairman of the January 16 session at which addresses will be made by Marcus Dow, Chicago; Dr. H. H. Myers, Dayton, and Ethelbert Stewart, Washington. A luncheon on the closing day will be presided over by J. M. Woltz, Youngstown.

State Welfare Director Griswold has abolished several small offices and divisions and created the division of business administration to handle the work done by the separate bureaus. Charles L. Sherwood, assistant director, was named chief of the new division.

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Analysis of Extent and Causes of Physical Defects of School Children

A thorough and comprehensive analysis of the physical defects of school children has been written by Dr. James Frederick Rogers, chief of the division of physical education and social hygiene of the U. S. Office of Education, and published in bulletin form by the Department of Interior.

In a brief introduction to his study, Dr. Rogers declares that "We are fast approaching a day when the directors of medical inspection in our schools will have the time for something more than rapid routine inspection of children and the reference of those found defective to some source of treatment and will be able to make more thorough studies of physical defects, looking not only to the question of just what should be done about them, but also toward the possibilities of the prevention of such defects in school children of the generations to come".

"For a quarter of a century", Dr. Rogers says, "the frequency and seriousness of physical defects in school children had been common knowledge but there was no great stir over the discovery until these same defects, only partly outgrown, were again revealed in children who had attained to military age. Strangely enough, war, which destroys life, aroused an 'interest' in the preservation and perfecting of life.

"In the past 10 years hardly an article or an address having to do with public welfare has begun without reference to 'the revelations of the draft'. These references have served to arouse public interest and it has been generally recognized that more ought to be done to improve our physique. Despite this agitation, we do not recall any attempt to look these 'revelations' squarely in the face and to determine specifically what can be done for children of school age toward doing away with or diminishing these defects and diseases. It would seem highly desirable that we know both the present possibilities and the limitations of improvement, and that we put forth unstinted effort accordingly in all communities, not as a matter of possible military contingency but as one of public and private philanthropy and economy."

Much of the study is devoted to statistics and data on the defects and diseases of school children and suggestions as to how the schools, parents and physicians can cooperate on these problems. Figures obtained from a study of 600,000 children in the rural, village and smaller city schools of New York State and from the examination of 12,344 pre-school children in Michigan are quoted extensively by Dr. Rogers.

In concluding his article, Dr. Rogers summarizes what he believes his study has revealed and suggests some of the things which he thinks can be accomplished.

"It must have been evident to the reader that children arrive at school with most of the defects

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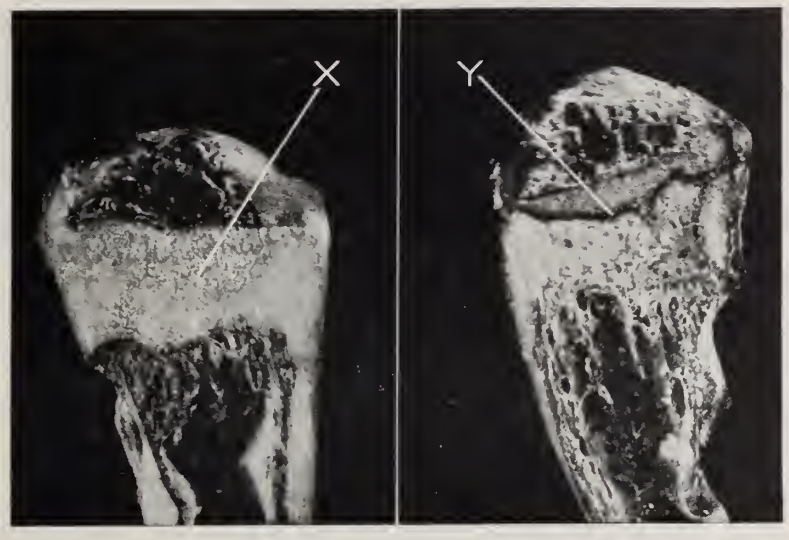
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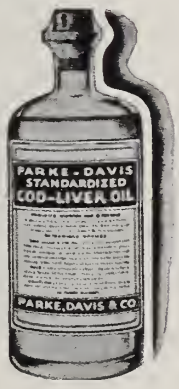
Illustrating "Line Test" method of standardizing Vitamin D content. At left, the leg bone of a rachitic rat showing induced decalcification area {X}. At right, healing has begun, as evidenced by initiation of recalcification at dark line {Y}.

How can vitamins be "measured?" What is meant by "standardized" when applied to Cod-liver Oil? Here, briefly, is the method followed in determining the vitamin content of Parke-Davis Standardized Cod-liver Oil:

To test for *vitamin A potency* the oil is given orally to young albino rats which have been fed on a diet free from vitamin A. We ascertain how much oil is needed daily to correct the induced typical eye condition (xerophthalmia) and to institute a specified rate of growth. The daily minimum amount of oil required to bring about this change constitutes one vitamin A unit.

Every lot of Parke-Davis Standardized Cod-liver Oil must contain not less than 13,500 units of vitamin A in each fluid ounce.

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Parke, Davis & Company was the first commercial laboratory to assay Cod-liver Oil for both vitamins A and D. Parke-Davis Standardized Cod-liver Oil is backed by years of research work in various phases of nutrition chemistry. Quite aside from its vitamin richness, this product has other distinguishing features which will appeal to you. It is clear, bland, and as nearly tasteless and odorless as a pure Cod-liver Oil can be. May we suggest that in prescribing Cod-liver Oil for your patients you specify the Parke-Davis product?

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found during their school career and nearly as many, omitting the results of accidents and using a corresponding liberal standard of examination, as at military age", he states.

"At least 75 per cent of the total defects found during school life are present in children of the first grades. Many of these defects can be compensated for or removed before entrance to school.

"A large proportion of these defects is the lot of the child through evolution, heredity, and congenital causes, as hernia, mental deficiency, epilepsy, some cases of deafness, some cardiac and most visual defects. Many are the result of, or are made worse by, malnutrition from conception onward through infancy, especially dental defects and probably lymphatic enlargement, while a host of abnormal conditions are the result of communicable disease aided by insanitary living. Some are due to social customs, as the wearing of shoes which conduce to bad feet. A few are due to ignorance of the facts of personal hygiene.

"Some defects, whether treated or not, tend to improve during school life, as nasal obstruction and many refractive errors. Some become progressively worse without treatment, as many serious eye defects, some defects of hearing, carious teeth and many foot deformities. Some can be removed, cured or prevented from growing worse, especially dental defects, badly diseased tonsils, some cases of tuberculosis, hernia, defective hearing, actual underweight, malnutrition, goiter, foot and other mechanical deformities and defective speech.

"Hardly more than 20 to 25 per cent of the children of school age have physical defects of serious importance. It is safe to say that more than half of the defects could be prevented, removed, or compensated for at school age. There can be no doubt but that the diseases and defects appearing still later in life would be proportionately diminished and the average days of existence considerably prolonged.

"If we desire a race even relatively free from disease and defects we must begin our efforts not only before school age but before birth. At school age we should have teachers fully trained to observe the physical conditions and behavior of the children with which they are associated, and we should have such special workers as will not only be able to contribute all that present-day knowledge has to offer for the benefit of the school child, but who will be able by study to improve and add to that knowledge."

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Merrell-Soule Powdered Milk Products, including Klim, Whole Lactic Acid Milk and Protein Milk, are packed to keep indefinite-

Mental Hygiene Developments in Ohio

That the mental hygiene problem is receiving considerable more attention in Ohio, both from official and non-official agencies, now than at any previous time is quite apparent.

While the State Department of Public Welfare is busily engaged in laying the solid groundwork for a constructive program to render more efficient state aid to the unfortunate victims of mental disorders, other agencies, unofficial in nature and scattered throughout the state, are undertaking separate projects, designed to better conditions in their communities.

As pointed out recently by State Welfare Director Griswold, the state can enlarge its facilities for caring for the mentally afflicted in need of institutional care, but the preventive and curative burdens of the mental hygiene question rest largely on the individual communities.

A move toward establishment of a permanent psychiatric court clinic in Cleveland has been launched by representatives of the Cleveland Bar Association, Cleveland Academy of Medicine and various welfare and social service agencies. The immediate objective of the sponsors of the plan is the securing of the necessary funds for establishment of the clinic, which, they say, should go far in reducing the number of crimes through analysis of the mental conditions of first offenders; should reduce the number of insanity defenses in trials; should aid courts and juries in determining fair punishment for persons accused in crimes, and should result in the incarceration of many in institutions where mental ailments can be remedied and adjusted, instead of in prisons.

In Youngstown definite steps have been taken in a campaign for a county psychopathic hospital where those suffering from mental disorders can be placed under observation for a limited period, doing away with the necessity for court action and commitment to a state institution until the exact status of the mental condition has been definitely established.

A new move toward establishment of a statewide mental hygiene association, comprising as component members many of the present groups and agencies interested in the mental hygiene question, is underway. Details of a plan for organization are now being worked out.

It was significant that several hours of the program presented at the recent state conference of health commissioners was devoted to a discussion of the mental hygiene question.

Strong sentiment and action in a vigorous campaign to meet this growing menace to the health and welfare of the public is being crystalized. Some of the plans and programs now underway



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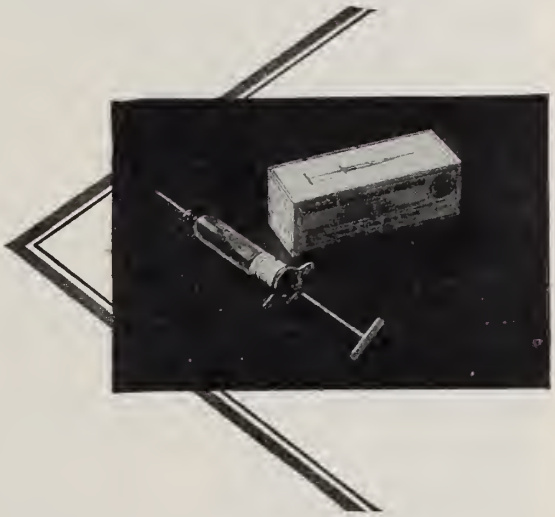
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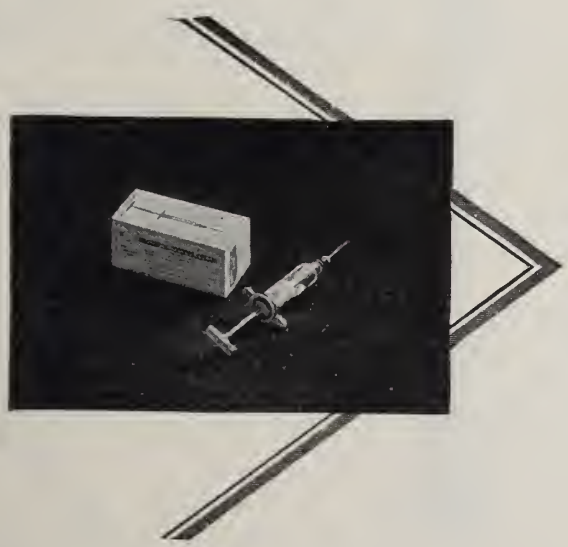
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or being devised may not go far in remedying the situation. Others may need revision and the benefit of more careful consideration and thought by those competent to size up the question. Nevertheless, evidence of enlarged initiative and activity in this broad field of health indicates that at least a partial solution to the problem is likely.

Misbranded Foods and Drugs

That the vigorous policy which has been followed by the Food, Drug and Insecticide Administration of the U. S. Department of Agriculture in attempting to stamp out unsafe and unethical practices in the manufacture and sale of adulterated or misbranded food or drug products is to be continued was indicated in a recent statement issued by W. G. Campbell, chief of that bureau.

Referring especially to the "multiple seizure" phase of the bureau's work which was brought to the attention of the public recently through a decision of the District of Columbia Supreme Court upholding the action of the bureau, Mr. Campbell declared that this activity of the bureau has been misunderstood by many and in many instances "individuals have attempted to exaggerate this procedure and make it appear as a threat to industry".

"It was evidently the purpose of Congress, in response to the national demand which existed prior to the enactment of the food and drugs act in 1906, and which in our judgment is equally insistent today, that provision be made in the act for instant and effective protection of the public through peremptory action such as that involved in the seizure and removal of goods from the market," Mr. Campbell stated.

"Not only the Department of Agriculture but the courts are conscious of the property rights of manufacturing firms and look with no favor upon the indiscriminate exercise of that power which authorizes confiscation.

"In our judgment, however, adequate protection of the public can not be guaranteed unless the right to institute seizure as now conferred by the statute is retained as one of the law's conspicuous features.

"Wishing to visit upon legitimate business the least possible expense or apprehension with respect to the continuation of a legal enterprise, we believe that the removal from the channels of trade of products of the nature described (adulterated and misbranded food and drug products) is not only no interference with ethical business, but is in fact emphatically a support and encouragement of proper business, and, first and most important of all, is necessary for the protection of the public."

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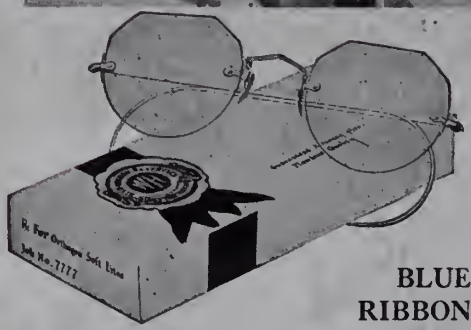
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FEBRUARY 1, 1930

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Number - - 2

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Jackson	W. R. Riddell, Jackson	C. C. Fitzpatrick, Jackson	1st Tuesday, monthly.
Lawrence	G. G. Hunter, Ironton	F. R. Stewart, Ironton	1st Thursday, monthly.
Meigs	P. A. Jividen, Rutland	Byron Bing, Pomeroy	1st Thursday, April, July and Oct.
Pike	O. R. Eylar, Waverly	L. E. Wills, Waverly	1st Monday, monthly.
Scioto	T. C. Crawford, Portsmouth	C. M. Fitch, Portsmouth	2d Monday, monthly.
Vinton	O. S. Cox, McArthur	H. S. James, McArthur	3d Wednesday, monthly.
Tenth District			
Crawford	Clarence Adams, Galion	R. M. Malone, Galion	1st Monday, monthly.
Delaware	M. S. Cherington, Delaware	A. R. Callander, Delaware	1st Friday, monthly.
Franklin	R. B. Drury, Columbus	James A. Beer, Columbus	1st four Mondays.
Knox	W. H. Eastman, Fredericktown	J. Shamansky, Mt. Vernon	Last Thursday, monthly.
Madison	R. H. Trimble, Mt. Sterling	H. P. Sparling, London	4th Wednesday.
Morrow	F. E. Thompson, Marengo	Todd Caris, Mt. Gilead	1st Wednesday, monthly.
Pickaway	J. B. May, New Holland	Lloyd Jonnes, Circleville	1st Friday, monthly.
Ross	John Franklin, Chillicothe	W. C. Breth, Chillicothe	1st Thursday, monthly.
Union	F. M. Wurtsbaugh, Richwood	H. C. Duke, Richwood	2d Tuesday, monthly.



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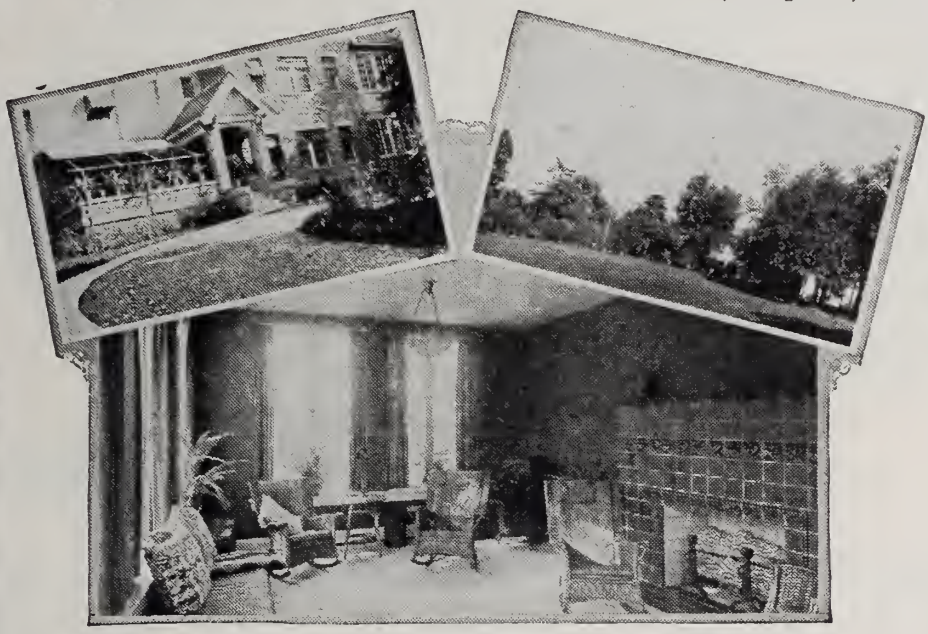
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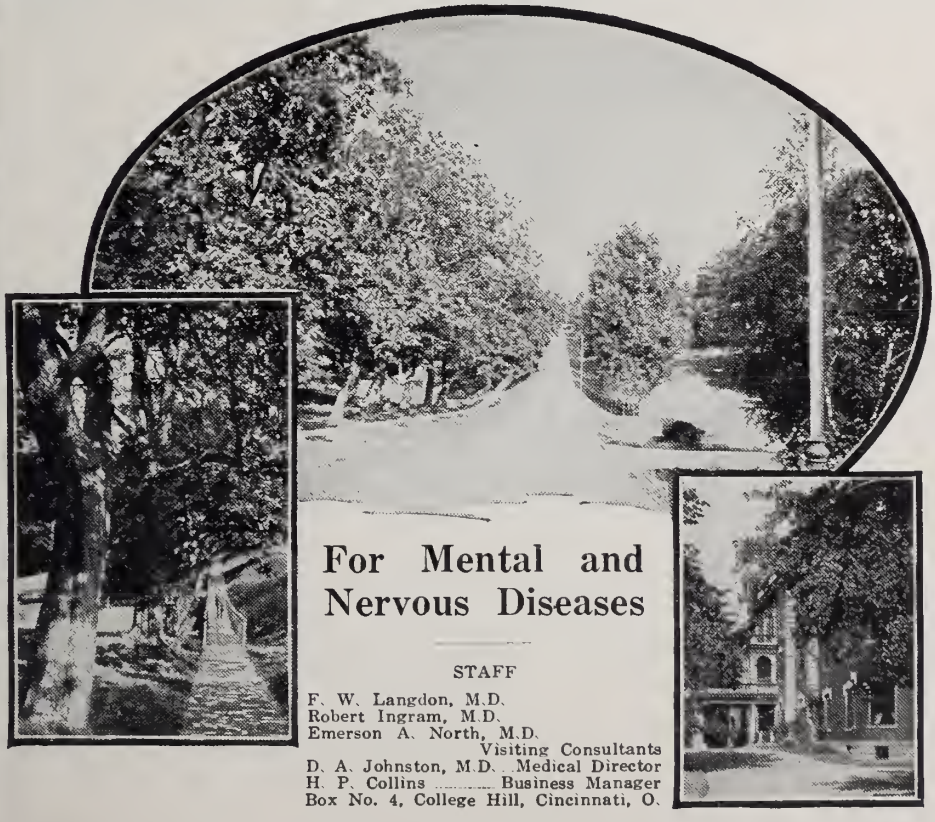
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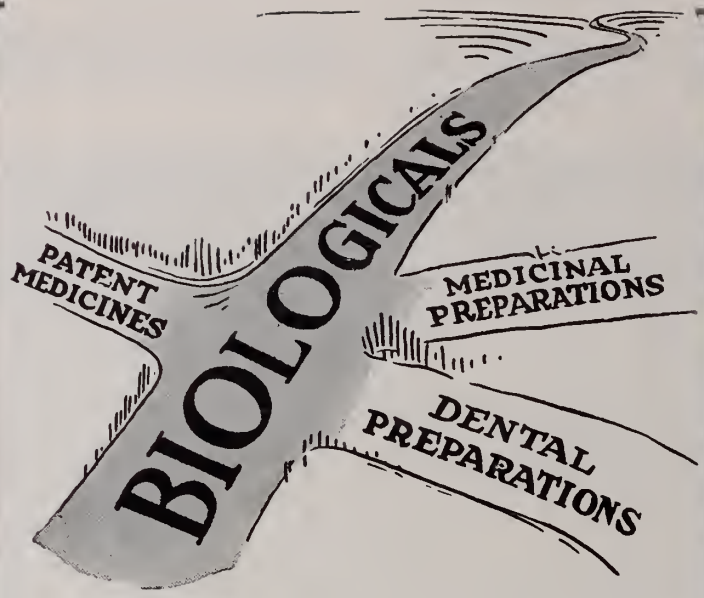
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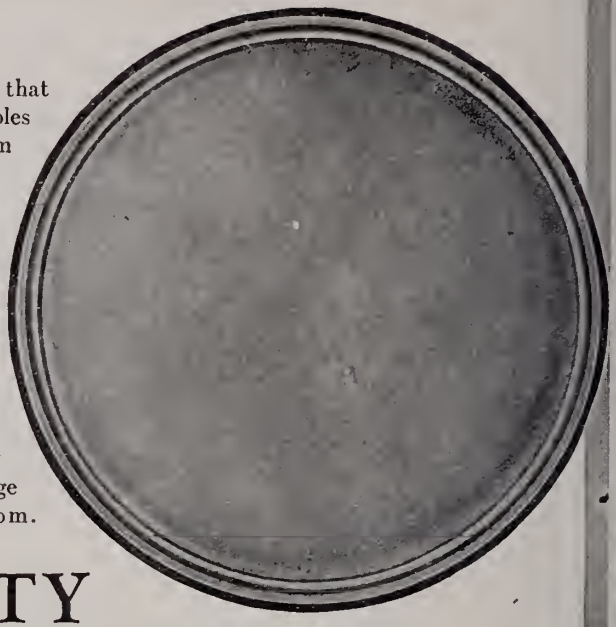


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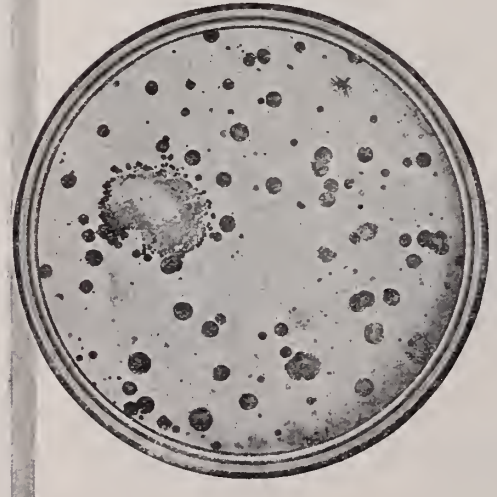
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Every day that Dextri-Maltose is manufactured, control samples for bacteriological analyses are secured from certain points in the process which experience has shown give an accurate picture of the bacteriological condition of the product in the different steps of its manufacture. As a result of experiment and experience, it has been demonstrated that by exercising certain strict sanitary control measures and precautions, the bacteria count can be reduced to the point where the finished product approaches practical sterility. The Petri-dish at right shows a plate count of only 40 bacteria per gram, obtained from a package of Dextri-Maltose selected at random.



THE REALITY OF THE UNSEEN

The things unseen determine the cleanliness, uniformity and safety of Dextri-Maltose. From years of study and experience, we know how to produce the bacteriologically clean product indicated above.



On the other hand, the Petri-dish at the left visualizes the potential danger that may accompany lack of experience. At 37° C., this sample (bought in the open market) showed a bacteria count of 420,000 per gram (compared with 40 per gram in Dextri-Maltose, as mentioned above). Every physician is deeply concerned about the pasteurization, certification, etc., of the cow's milk his babies are fed on, but even sterile milk would give the infant *over seventeen million* bacteria per daily feeding when "modified" with a carbohydrate such as is represented by the Petri-dish at the left.

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PUBLIC HEALTH - SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Members of the Ohio State Medical Association should begin now making plans to attend the Eighty-Fourth Annual Meeting of the State Association at Columbus, May 13, 14 and 15.

First Call—Annual Meeting

Although the time of the yearly get-together of Ohio physicians is three months away, every member is earnestly requested to start arranging his professional and social affairs so that he can be present and assist in making the 1930 gathering one of the best, if not the best, in history.

The Columbus Academy of Medicine, which has an enviable record as a gracious host and an efficient director-general of annual meetings, has arranged to hold the Eighty-Fourth Annual Meeting at the Neil House.

Those who attended the 1927 annual gathering, held in Columbus, will recall the splendid accommodations and efficient arrangements furnished by that historically-famous hotel for that year's meeting.

The committee on arrangements of the Columbus Academy has contracted with the Neil House management for accommodations similar to those supplied in 1927. This means that there will be large and convenient rooms for the scientific section meetings, and meetings of the House of Delegates; a spacious ballroom for the general sessions; and well-located space for the exhibits, and several dining rooms for the social affairs attending the meeting, all under one roof and in the heart of the business and shopping district of Columbus.

Many months of hard work have been spent by the various committees, both of the Council of the State Association and of the Columbus Academy, in drafting the program and arranging all incidental details. Much of the preliminary work has been completed. The various scientific programs are under way; plans for holding clinics at Columbus hospitals and medical centers have been drafted and the arrangements for the annual golf tournament on the day preceding the annual meeting well in hand.

Detailed information on all phases of the meeting will be furnished in later issues of *The Journal* when members also will be supplied with data on the Columbus hotels—their location, rates, types of service, etc.

Arrangements for the annual meeting are being made under the general direction of the Council Committee on Arrangements, composed of Drs. S. J. Goodman, Columbus, chairman; I. P. Seiler, Piketon, and D. J. Slosser, Defiance. The program is being drafted under the direction of the following Council comittee: Drs. C. W. Waggoner, Toledo, chairman; D. C. Houser, Urbana, and S. J. Goodman, Columbus, secretary of Council.

Dr. Goodman is general chairman of the Columbus committees, his assistant being Dr. Drew L. Davies. Members of the various local committees are as follows:

Reception—Robert B. Drury, president of the Columbus Academy of Medicine, chairman; R. A. Ramsey, L. L. Bigelow, Louis T. Hess, Charles A. Neal, James A. Beer, E. A. Hamilton, Andre Crotti, J. F. Baldwin, J. H. J. Upham, Wells Teachnor, Sr., John B. Alcorn, W. H. Pritchard, E. J. Emerick, F. L. Keiser, C. O. Probst and George T. Harding.

Halls and Meeting Places—J. Quinn Dorgan, chairman; medical section, John Rauschkolb, R. J. McGuiness, Fred Hall; surgical section, M. H. Turton, Paul D. Scofield, Henry H. Schwarzell and C. I. Britt; obstetrics and pediatrics section, Samuel D. Edelman, Orville L. Baldwin, E. H. Baxter and Herman W. Koerper; eye, ear, nose and throat section, F. W. Thomas, Morris Goldberg, E. W. Harris and W. C. Davis; public health and industrial medicine section, N. C. Dysart, C. M. Valentine, P. B. Wiltberger, H. H. Snively; nervous and mental diseases section, G. T. Harding, III, F. C. Wagenhals and Clarence Fry.

Entertainment—Joseph Price, chairman; Roy E. Krigbaum, John W. Means, C. W. McGavran and L. M. Murphy.

Clinics—Fred Fletcher, chairman; Andre Crotti, Wells Teachnor, Jr., I. B. Harris, Joseph Price, J. M. Rector, E. J. Gordon, G. Wayne Brehm, Ivor G. Clark, John Edwin Brown and A. M. Steinfeld.

Projection—Hugh A. Baldwin, chairman; and Jonathan Forman.

Exhibits—L. H. Van Buskirk, chairman; B. W. Abramson and C. J. Shepard.

Radio Quackery

Announcement of the beginning of a vigorous campaign against radio broadcasting by quack doctors and fake healing concerns is welcome news for members of the medical profession and public health workers in Ohio.

Every reader of *The Journal* will be interested in an article, appearing elsewhere in this issue, telling in detail of the steps which already have been taken by Dr. Shirley W. Wynne, health commissioner of New York City, in his move to enlist federal agencies and representatives of national organizations in this nation-wide clean-up of the air.

Physicians of Ohio, collectively and individually, have been vitally interested in, and concerned about, the widespread use of broadcasting channels by charlatans and sponsors of false, harmful and misleading health propaganda.

Through the efforts of the Ohio State Medical Association and its component academies of medicine and county societies, in cooperation with better business bureaus and others directly concerned, much obnoxious medical propaganda and harmful health information and advertising has been eliminated from the columns of newspapers and magazines circulating in Ohio and from programs broadcast from some of the radio stations operating in this state.

However, despite encouraging success in some parts of the state, the amount of improper and untrue medical and health propaganda has increased generally in Ohio. This also has been true in most other states, despite campaigns by physicians and public health officials. As well stated recently by Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*, "the radio has become a veritable sewer for the distribution of patent medicine and nostrum promotion which could not reach the public in any other way."

Many newspaper and magazine owners and editors throughout the country have awakened to the harmful effects of dangerous and untrue health information and advertising, and most reputable publishers are now insisting that all medical and health advertising receive the approval of competent medical and health authorities before it is published.

Some idea as to how many newspapers view this question is obtained from the following paragraph of an editorial which appeared recently in an Eastern metropolitan daily:

"Newspapers and magazines no longer tolerate quackery in their advertisements. But if quackery is permitted to be advertised by radio, a new field is opened up for illegitimate and victimizing fakery. The Federal Radio Commission should sift this matter to the bottom, and if radio stations continue to permit fraudulent claims of cures to be broadcast, some means should be found to check them. If nothing short of revocation of station licenses will do the trick, this extreme method should be invoked on positive proof of fraud."

Ohio physicians generally believe that the time is ripe for a powerful, concerted move to drive these fakers, faddists and fanatics from the air. Methods to accomplish this must now be developed.

Dr. Wynne is correct when he states that he does not rely entirely on a system of government censorship. He also is correct when he declares that he believes much can be accomplished through more rigid enforcement of the laws which already are on the statute books, governing false advertising and fraud in pursuit of business, and that most beneficial results can be obtained by "voluntary scrutiny of programs by the broadcasting stations".

Gratifying results have been obtained in the newspaper and magazine fields through mutual cooperative agreements between publishers, better business bureaus and law-enforcement officials. It is likely that some such plan can be worked out for the radio field. This method is worth trying and would eliminate any criticism of interference of the government with private rights through oppressive legislation.

Members of the medical profession in Ohio agree with Dr. Wynne that something must be done to rid the air of this growing menace and stand ready to give their earnest support and cooperation to any proper and practical method of accomplishing this.

Economic Outlook in 1930

The ledger of the practicing physician may be a good barometer of business conditions in the community in which he resides.

It is unfortunate, but true, that the physician is usually the last person paid, and especially is this true when business conditions are at a low ebb or money is "tight".

No alert physician shuts his eyes and ears to the trend of general business conditions, for his bank account is bound to be affected by the decrease or increase of the pulse beat of industry and commerce. Every physician may gage his activities for the approaching year by the indications of financial and business conditions.

What is the outlook for the year 1930?

According to Colonel Leonard P. Ayres of the Cleveland Trust Company and nationally known economist, general business in 1930 "will be slower but not slow, poorer but not poor".

A forecast for the new year, published in a recent issue of the *Fourth District Finance and Industry*, also is interesting. It is as follows:

1. Short-term interest rates will probably have a downward trend as we enter the early

months of 1930, changing to a rising one before the close of the year, with average levels well below those of 1929, but not below those of 1927.

2. Production of cars and trucks in the United States and Canada in 1930 will probably fall below that of 1929 by more than half a million, but not by more than a million.

3. The total value of building construction in 1930 will probably not differ from that of 1929 by more than five per cent.

4. Stock prices in the closing months of 1930 will probably be well above the levels of the closing months of 1929, but still below the recent high levels.

5. Total output of iron and steel in 1930 will probably be distinctly less than in 1929.

6. It seems unlikely that the cost of living will change much in 1930.

7. The average wholesale prices of non-agricultural commodities in 1930 will probably be less than in 1929, but not by more than five per cent.

8. It is likely that there will be more unemployment in the early months of 1930 than in the corresponding months of 1929, but with conditions improving as the year advances.

9. Average industrial wage rates will probably not differ in 1930 by more than three per cent from the 1929 average.

10. Costs of building will probably not change greatly in 1930, but the trend is likely to be a declining one.

11. The net profits of industrial corporations in 1930 will probably be distinctly less than in 1929.

12. The total of our tourist travel abroad will decline.

Summary: The year 1930 promises to be a year in which business will start poorly, and finish well, a year of more bond flotations, and fewer bank mergers; a year of more trust in investments, and fewer investment trusts; a year of renewed speculation with decreased tribulation; a year of reduced profit margin calls; a year without so many shocks to the nervous system, and without so many warnings by the Reserve System.

Health Cooperation

Practical application of the recognized principle that cooperation and understanding between the medical profession and public health workers is of primary importance in community health work has been developed in Belmont County by Dr. F. R. Dew, health commissioner of that county.

Dr. Dew is utilizing a new method in enlisting the strength of the organized medical profession behind his public health program which gives promise of producing extremely beneficial results.

In connection with the December issue of the monthly bulletin, published by the Belmont County Health Department, Dr. Dew sent out a supplement especially for the physicians of the county. After expressing his appreciation for the support his department has received from the medical profession and extending the season's greetings, he printed the list of newly-elected officers of the Belmont County Medical Society; admonished the members that annual dues should be paid at once; urged more general and more regular attendance at meetings of the society; outlined the program of a recent joint medical-dental meeting; called on physicians to contribute articles and suggestions for the betterment of public health in the county and made a suggestion or two regarding immunization against diphtheria and the reporting of communicable diseases.

Dr. Dew's policy of outlining his program to the physicians of his district; asking them for views and criticism of the work in progress, or suggestions for future activities, and calling for the support and cooperation of the medical profession in the health work of the community, is certain to give Belmont County a high-type, efficient and result-producing public health administration. Such methods are necessary to the advancement of public health work in every county of the state.

In the opinion of the *Ohio Health News*, publication of the State Department of Health, this plan of Dr. Dew's "is one of the most forward pieces of work for strengthening relations between the medical profession and the official health agency that has come to the notice of O. H. N. and Dr. Dew is to be congratulated that he has pioneered the way".

That publication makes the suggestion that other health commissioners who issue bulletins "may well do likewise".

Expanding State Medicine

Expansion and enlargement of the present systems of state and socialized medicine, which exclude the private practitioner and destroy the relationship which has been built up between the individual physician and the patient, are in evidence in many parts of the country.

Members of the medical profession who have been inclined to take none too seriously the warnings which have been issued concerning the rapid spread of subsidized medical service for all classes of society may find their confidence in the belief that "there ain't no such animal as state medicine" rudely jolted by studying a proposal which has been filed with the legislative clerk of the Massachusetts House of Representatives for presentation at the next session of that body.

The measure would set up a new state department to "furnish *free and complete* medical service to the people, patterned upon the Bureau of Medicine and Surgery of the United States Navy". It provides for the abolition of the department of health and the department of men-

tal diseases, these departments to be replaced by the new department which also would assume certain activities in the medical line of the Department of Public Welfare. The new department would be in charge of a commissioner to be known as medical administrator of Massachusetts, whose salary is fixed at $10,000 and allowances, with provision for five assistants at $8,000 each.

In addition to supplying free medical and surgical service, the new department provided for in the bill would maintain hospitals and furnish necessary drugs and mechanical appliances for the patients. An initial appropriation of $1,000,000 for organizing the proposed department is provided in the bill.

According to the *New England Medical Journal*, one of the sponsors of the measure is Dr. Gilbert W. Haigh of Worcester and a member of the Massachusetts Medical Society. It is quite likely that Dr. Haigh is the Gilbert W. Haigh, M.D., under whose signature appeared an article, "State Medicine, Boon or Bogy?" in the February, 1929, issue of the *North American Review*. Physicians who read that article will remember the fallacious reasoning employed by Dr. Haigh in his attempt to show that direct state medicine would be a "boon" to the people.

Those who contend that the fear of state medicine is but the hysterical dream of alarmists undoubtedly will find the situation in Massachusetts somewhat disillusioning.

Incidentally, it is interesting to note that numerous efforts are now being made to get the Federal Government to further extend its medical and hospital service which is in operation on an elaborate scale.

The most recent of these attempts to establish Uncle Sam as a medical practitioner and hospital executive is in the form of a bill sponsored by the U. S. Navy Department which would provide admittance to naval hospitals of the dependents of officers, nurses and enlisted men of the Navy and Marine Corps, "providing the commanding officer of the hospital concerned has suitable accommodations available in excess of the prospective needs for the care of naval personnel and others heretofore authorized by law to use the hospitals".

Although the measure provides that the payment of all expenses of such dependents shall be checked against the pay of the officer, nurse or enlisted man concerned, the plan would probably extend government medical and hospital service to persons who are able to pay for similar services from private practitioners and private hospitals. That the proposal would extend the present system of state medicine to a new class of society is beyond question.

Medical Disadvantages in Russia

Some interesting observations and comments on medical practice in Russia under the Soviet regime were obtained by the *New York Herald Tribune* from Dr. Ralph A. Reynolds, retired president of the American Medical Association of Vienna on return from a visit to Russia.

Dr. Reynolds pointed out that under the socialist system every worker is insured and when he gets ill the insurance not only pays the full wage during the time of disability but also the hospital expense. Everyone is entitled to free medical service at government expense and village clinics have been distributed so that each clinic serves a population of 15,000, which means that in the more sparsely populated districts many persons are more than 50 miles from a doctor, he said.

Speaking more in detail on the effect of the Soviet system on medical research and practice, Dr. Reynolds said:

"The Russian government spends money lavishly on modern instruments and other equipment. Funds are always available for research work and propaganda, but the salaries of doctors are small and cannot compare with what a professor or a practitioner can earn in other countries. Physicians of high standing get about one hundred dollars a month and have to be contented with a miserable home of one or three rooms with a kitchen that is often shared by as many as six families. The idea is that a doctor's home should not be so good as the class of homes given to Communist skilled workers who form the aristocratic class in the Soviet Republic.

"As the prospects for the medical students are totally different from what they once were, the class of people who go in for medical studies has undergone considerable change. Only those who support the Soviets enter the medical career. Women students, who, before the war were 34 per cent are now 55 per cent of those studying medicine. Ninety-seven per cent of all medical students are educated by the government. In return they must go where the government sends them when they have completed their studies. For many this means exile in some out of the way place with great hardships. After having served three years on the post assigned to them they are free to make a choice of their own.

"Russian doctors follow the progress of medicine in other countries closely and take over all improvements, but their own research leaves much to be desired."

Acute Ileus

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THE fact that intestinal obstruction, in this day and age of scientific, diagnostic and therapeutic idealism, maintains a high mortality in institutions of standing and repute, is the vis a tergo for this presentation. My experience has impressed me with the thought that there is no excuse for the high mortality figures in some types of ileus. The surgical fraternity is noticeably devoid of fortitude, particularly when faced with the post-operative variety. I believe that a great share of the dire results reported are in direct ratio to old fashioned methods and time consuming procrastination.

The classification of intestinal obstruction has been much simplified in the recent literature. Foster[1] defines two fundamental classes of acute intestinal obstruction:

(1) Such cases as bands and adhesions which cause acute simple obstruction of the continuity of the gastro-intestinal tract without primary vascular derangement.

(2) Those, such as volvulus, incarcerated hernias, and intussusception in which there is a variable length of intestine obstructed as well as an interference to the vascular supply of the segment, acute intestinal strangulation. Foster also mentions those cases not purely mechanical but existing because of bowel atony and progressing to paralytic ileus. This classification appeals in its simplicity and completeness. That there is considerable difference in the pathology of these types is evident, strangulation having the additional pathology of gangrene and rapid clinical progression.

Ileus is a confusing term. From its derivation it means to twist or roll. We ordinarily use it in connection with the syndrome of acute retention of the bowel contents. It is more definitely employed in surgical terminology, in the older classifications, in combination with the adjectives, mechanical, dynamic, and paralytic. Mechanical ileus, dynamic, and paralytic ileus are sufficiently comprehensive to include all forms of obstruction regardless of cause. Mechanical ileus may be caused by irreducible hernias, either internal or external, new growths, constricting bands, intussusception, volvulus, cicatricial strictures, pressure from abdominal tumors, congenital defects and foreign bodies.

Mesenteric thrombosis has been classified as mechanical obstruction though the interference is due to paralysis. Spastic or dynamic ileus is obstruction due to constriction or spasm. It is usually toxic and due to lead or ptomain. This type is not common and is not ordinarily surgical. Paralytic or adynamic ileus is a paralysis of the intestinal musculature and may be due to trauma, infection, reflex motor paralysis or general systemic depression. The most frequent cause is a spreading intra-abdominal infection. It is quite evident that the local pathology is diversified in these various forms of retention of the bowel content. It would be a hopeless and academic task to attempt evaluation here. Our chief concern in this resume is the gospel of early and accurate diagnosis and treatment, bearing in mind that the location of the obstruction in the intestinal canal is always of extreme importance.

Experimental Surgery[1] has added much to the chemistry of Ileus and has justified many times honored, empiric routines. Experimental animals have demonstrated a blood chloride loss of 11-19%, hence the rationale of normal saline in the treatment of Ileus. Hypochloraemia and toxemia are causes of death in intestinal obstruction. Non protein nitrogen retention is not considered a lethal factor. Experiment proves that excessive vomiting is responsible for the hypochloraemia. Forty per cent of the chloride loss in animals has been recovered from intestinal washings. Shock and toxemia supercede hypo chloraemia in strangulation and there is considerable variability depending upon the level of the lesion and the amount of bowel involved.

Dehydration and chloride loss are complications arriving after twenty-four hours in cases of intestinal strangulation. Orr and Haden[2] have called attention to the increase of non protein nitrogen, decrease in the chlorides, and a rise in the carbon dioxide combining power of the plasma. These authorities further state that life can be prolonged until death results from starvation and exhaustion by the administration of water and sodium chloride. They emphasize the increased blood viscosity and consequent interference with the circulation and oxygenation. There is a marked decrease in the suspension stability of the blood cells as demonstrated by the sedimentation test. Dehydration is a constant and important factor. McIver and Gamble[3] observe that a continuous loss of digestive secretions causes a rapid withdrawal of the sodium and chloride ions from the body with a reduction of the volume of the blood plasma and of the interstitial fluids, and a consequent alkalosis or acidosis of varying degree. Thereupon is the advancement of the surmise that these chemical changes cause death and that death can be prevented by the administration of physiological salt solution and that the hypothesis of a toxin is unnecessary.

Much of the work reviewed has been experimental and deals with high intestinal obstruction

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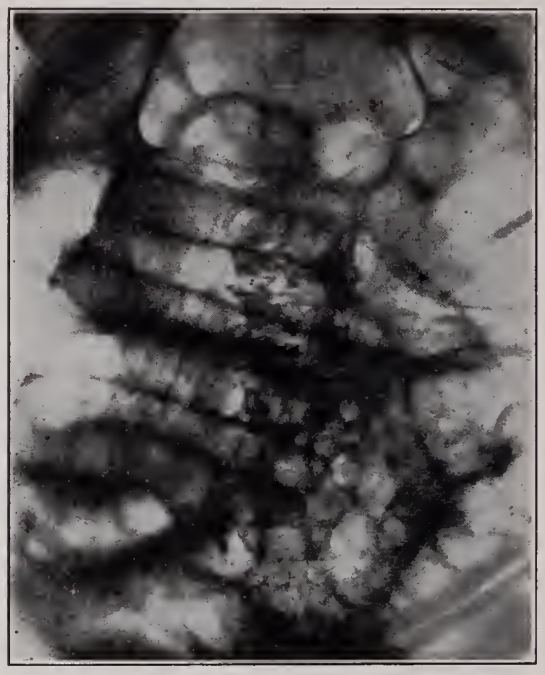


Plate 1—Showing a typical small bowel distention with step-ladder picture. X-ray made early in obstruction due to cancer of the pelvic colon. Patient 72 years old, expired forty-eight hours following spinal anesthesia and colostomy.



Plate 2—Showing clearly one loop obstruction occurring eight days after suspension operation and appendectomy. Obstruction in the right iliac fossa. Obstruction relieved. Patient recovered.

although the body chemistry is effected in variable degrees where ever the obstruction may be. Cooper[4] believes that high intestinal obstruction results in alkalosis and definite dehydration with toxemia. He states that in simple obstruction alkalosis and dehydration are more prominent and that toxemia may enter to a varying degree, and that in closed loops and strangulation, toxemia is the most important factor. He feels that there is a toxin in the lumen of the obstructed intestine and that it reaches the blood stream. It is difficult for some of us, working in the practical rather than the experimental field, to forsake the idea of toxemia in intestinal obstruction. That toxemia plays an important role in mechanical ileus is a traditionary rather than an established scientific fact. While chemical changes in the blood cause death, they may be the result of toxins. The paralytic form of ileus is, to my mind, entirely toxic with involvement of the plexuses of Meissner and Auerbach.

These recent studies and communications do not affect the practical surgery of ileus. The preoperative and postoperative treatment are placed upon a sound basis where they were formerly purely empiric. There is no room for procrastination in this particular field of surgery. Because an experimental animal with a complete obstruction can be kept alive for long periods by administration of salt solution does not justify delay in any form of mechanical obstruction from any cause.

The diagnosis of obstruction is not difficult. The surgical mind is ever suspicious of its existence. Pain, nausea, vomiting, and distention are the essentials. Visible peristalsis and obstipation are secondary. Pulse, temperature, and blood findings are of no importance. The use of the stethoscope is important. The pain usually stimulates colic and is crampy in character and tends to be arrested at the point of obstruction. The excessive peristalsis which accompanies the pain can usually be seen, palpated or ausculated early in the course of this catastrophe. Localized tenderness is present at or near the obstruction in most cases. The type of ileus determines the presence or absence of a mass and also the presence or absence of blood in the movement. Constipation is usually, but not always, an immediate symptom. Expulsion of flatus may be, but is not ordinarily, accomplished. Enemata are administered with little or no results.

In post-operative mechanical ileus the picture is identical. Pain, nausea, and vomiting in a patient recently operated upon are warning signals and should excite the immediate interest of the attending surgeon. That these patients expire because of delayed or mistaken diagnosis is irrefutable. Peritonitis is frequently the accredited post-operative complication. The high mortality in all types of mechanical ileus is due in great part to delayed rather than faulty diagnosis. "Operate when you think an obstruction exists" is a sound dictum because ofttimes when certainty is attained the patient is doomed. No one covets the necessity of returning to the oper-



Plate 3—Early small bowel obstruction. The coils of small bowel are plainly visible. Obstruction relieved. Patient recovered.



Plate 4—Post-operative obstruction following appendectomy and drainage. Plate taken within two hours following the first pain and nausea. Obstruction relieved and patient recovered.

ating theatre for secondary laparotomy a patient just recovering from a previous surgical procedure, but at such a time above all else, fortitude and conviction must over-rule all sentiment and the usual methods of delay and palliation be relegated to the surgical museum.

Multiple enemata, esarin, pituitrin and stupes never improve a case of mechanical ileus; the patient is made worse, perforation invited and mortality challenged. It is my practice to send such a case, post-operative or otherwise, to the *X*-ray room immediately for a flat plate of the abdomen. This method of diagnosis described by Doctor Case and others has never failed me at St. Vincent's Hospital. The flat plate will establish a diagnosis long in advance of certain so-called classical signs which are, in fact, signs of dissolution. A negative plate is reliable evidence that no mechanical obstruction exists. Negative findings in our *X*-ray department have, to my knowledge, never betrayed us.

The typical pain with nausea, vomiting, and distention occur early in obstruction but may occur in other abdominal conditions. They should, particularly in the post-operative case, spell obstructive ileus until proved otherwise and such a patient should have the immediate benefit of a flat plate and be returned to the surgery without question, if such a plate is positive in the hands of an experienced observer. Opaque substances are unnecessary and contraindicated. Severe paralytic ileus, post-operative, is not frequent in this day and age of aseptic surgery and improving technique. It may be differentiated from the mechanical type by the absence of the characteristic "colic like" pain, and the presence of paralytic distention which does not respond to the ausculatory test. There are no purely roentgenolic criteria which permits this differentiation[3]. Clinically it may be difficult or impossible. The "herring bone appearance" described by Case may justify a short delay while awaiting bowel movement through the medium of milk and molasses enamata and small doses of pituitrin. The surgeon should remain in constant attendance upon such a patient. Illeostomy is indicated in my judgment and the patient should not be jeopardized by watchful waiting. We are dealing with ileus and our first impressions in these cases are the best. The case of paralytic ileus which is so difficult to distinguish from the mechanical type will rarely recover without enterostomy. We must remember that the mortality figures are high because of lack of early surgery rather than too quick decision. Valuable time should not be wasted in an endeavor to differentiate mechanical and paralytic ileus. There is really some justification for the belief that some cases of paralytic ileus, so diagnosed, may in reality be mechanical obstruction.

It is difficult to believe that the recent clinical studies and experiments tell the physiological story of obstruction of the bowels. Toxins must be included in the picture. Surgeons of experience have expressed themselves as apostles of the theory of toxemia in ileus rather than disciples of inanition, hypochloraemia and dehydration. To my mind, these latter conditions may exist

"post hoc" rather than "propter hoc". Dragstedt[5] in his experimental studies finds that in addition to the blood changes already mentioned, that the fluid from obstructed loops in dogs causes characteristic symptoms of acute obstruction if injected into the peritoneal cavities of healthy animals.

Since the advent of enterostomy, most surgeons are in accord regarding the enhancement of end results and decreased mortality. The operation is simple and can be accomplished under local anesthesia with ease. Distention is relieved, vomiting controlled, the patient made comfortable, the toxic bowel content drained, and an an avenue for salt solution opened. It is frequently unwise to search for the site of the actual obstruction unless the case is early, the patient in excellent condition and peritonitis absent.

Many cases with actual mechanical obstruction will recover without further surgical procedure. It is my impression that enterostomy is a sensible procedure in those cases where the obstruction is relieved at the first operation or where bowel resection has been done. It is always a sane undertaking above the site of an intestinal anastomosis. That this operation has been advocated in general peritonitis and accomplished with good results is due in all probability to the relief given the progressing paralytic ileus which accompanies peritoneal infection. Intestinal drainage by enterostomy is a sound addition to the treatment of ileus, mechanical or paralytic, as the sole procedure in grave cases, and as an addition to the necessary bowel surgery in other cases.

Controllable spinal anesthesia has recently been used by some surgeons in the treatment of paralytic ileus and as a test to differentiate mechanical and paralytic obstruction, copious movement following its administration in the paralytic case. Doctor Pitkin[7] has been able to afford relief in about sixty-five per cent of his cases. This form of treatment depends upon severe peristalsis following immediately the injection. In the absence of mechanical obstruction or peritonitis it would seem advisable, but who shall say that neither mechanical obstruction or peritonitis are present? In event they exist the result must border on catastrophe.

Recent personal experiences have left the impression that intestinal obstruction may be a definite contraindication to the use of spinal anesthesia and this paper would be incomplete without this warning at a time when Doctor Pitkin has placed this excellent method in the ascendancy. I have seen profound collapse follow its use in obstruction. Studdiford[8] advocates its use in paralytic ileus after failure of other methods and reports five cases. In using spinal anesthesia[7] the anesthetic must reach the splanchnic plexus. When this plexus is anesthetized, peristalsis is increased to such an extent that it produces collapsed intestine.

Spinal anesthesia also relaxes the sphincter and in ten minutes time following injection, gurgling and movement of gas can be heard in the intestines. If the obstruction is mechanical there is, according to Doctor Pitkin, no reverse peristalsis and no vomiting. This is quite the reverse picture seen when pituitrin is injected. This drug, in my experience, causes increased pain and vomiting. I believe that all agents which are beyond the control of the operator after injection should be used with considerable care and discretion and if used purely for diagnostic purposes in the field of obstruction, their use is to be questioned. Recognized paralytic ileus may justify the employment of these drugs. The use, at St. Vincent's Hospital, of spinocain is increasing daily but the cases of paralytic ileus have been too few to afford a basis for definite record.

Koehler[9] reports twenty-seven cases of intestinal paralysis treated by nicotine injection of the coeliac ganglion. Five-eighths milligrams of the chemically pure nicotine base dissolved in forty c.c. of sterile water were used. The paralytic ileus was relieved in seventeen cases. The negative results were thought to be due to ineffective nicotine preparations. Spinal anesthesia seems a safer and saner procedure if the nervous mechanism of the bowel is to be attacked.

In conclusion, may I venture to suggest that too many diagnosticians and practitioners are inclined to be not "surgically minded" when cases of ileus are seen, and innumerable cases, in the early phase, are treated in a palliative manner and precious moments and hours lost. Surgeons, too, are prone to delay especially when facing a post-operative case which presents pain and vomiting. Early suspicion and diagnosis of existing difficulty is the "sine qua non" of ileus, which in my experience, is rendered easy and certain by the use of the flat *X*-ray plate. Diagnosis should be made before the appearance of text book symptoms and surgical interference should follow immediately. Enterostomy is recommended as a life conserver. Saline by vein and by hypo-dermoclysis is essential. Nothing has as yet been said or written which justifies delay. When surgery arrives at the absolute peak of refinement and possibility, ileus in all forms will still be with us. Results everywhere can be enhanced. The mortality can be greatly reduced and lives saved.

I submit to this audience that ileus should be suspected rather than diagnosed by clinical signs and symptoms, and that the more general use of the flat *X*-ray plate will bring to the surgeon obstruction of the bowels in the early stage, before the appearance of textbook symptoms, when the operator will not be hampered by the bad

risk, and moribund case. Therein lies the secret of decreased mortality in ileus.

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DISCUSSION

F. F. LAWRENCE, M.D., Columbus: All surgeons of experience recognize that post-operative ileus is, in the acute form, always paralytic—that is, the ileus which occurs within the first week after operation.

There are four factors entering into the cause of this post-operative ileus. The first is the indiscriminate or indiscreet use of morphine. I have no quarrel with the proper and judicious use of morphine, but the hypodermic to relieve pain before we have discovered the cause of the pain is indiscreet use and often, if not always, leaves us in the dark.

The second factor is that too often we forget the sympathetic nervous system. This is the center of shock and the arbiter of not only peristalsis but secretion and excretion; and when we hang our patient up in Trendelenberg position for forty minutes to an hour and a half, we make traction on the mesentery and irritate the mesenteric sympathetic to a point of paralysis.

The third factor which operates both in production of acute and deferred ileus is packing the abdomen with gauze or towels directly traumatizing not only the peritoneum, but the large sympathetic ganglia in the abdomen. There is no excuse for packing an aseptic abdomen with gauze, towels or anything else.

Fourth, incomplete preparation for operation allows a large amount of intestinal content to remain, ferment, develop gas, distend bowels, produce toxins and otherwise damage, if not damn our patient.

Post-operative ileus of a mechanical nature—that is, from adhesions, kinking, and from getting a loop of bowel caught in wound or in tissues sutured or ligated down in the pelvis or deep in the abdomen, are preventable largely by a technique which will avoid trauma to peritoneal surfaces. There is no excuse for packing a lot of gauze, sponges, or towels in an aseptic abdomen. Trauma is the most important factor in producing shock and shock is a very potent factor in causing ileus of the paralytic type, because of the fact that in shock both secretions and excretions are diminished or suspended entirely, and with the sympathetic out of commission, distension of the bowel, stasis of contents and development of toxins, the cause is made complete and active.

REFERENCE

(1) Foster, W. C., Intestinal Obstruction, J.A.M.A., Vol. 91, No. 20, page 1523, November 17, 1928.
(2) Haden, R. L. and Orr, T. G., Clinical Factors in the Toxemia of Intestinal Obstruction, J.A.M.A., Vol. 91, No. 20, page 1529, November 17, 1928.
(3) McIver, M. A., and Gamble, James L., Body Fluid Changes Due to Upper Abdominal Obstruction, J.A.M.A., Volume 91, No. 21, page 1589, November 24, 1928.
(4) Cooper, Henry, S. F., The Cause of Death in High Obstruction, Archives of Surgery, Volume 17, No. 5, page 918, December, 1918.
(5) Case, James T., Roentgenologic Aid in the Diagnosis of Ileus, American Journal of Roentgenol, 191 No. 5, page 413.
(6) Dragstedt, C. A., Northwest Med., 1928, xxvii, page 409. (Quoted by Cooper (4).
(7) Pitkin, George P., Personal Communication.
(8) Studdiford, N. E., Spinal Anesthesia in the Treatment of Paralytic Ileus, Surg. Gyn. Obst., Vol. xlvii, No. 6, December, 1928, age 863.
(9) Koehler, H., The Relief of Intestinal Paralysis by Injection of Nicotine into the Coeliac ganglion. Verhandl, D. Gesellsch, f. Verdaunngs—W., Staffwechnelgrankh, 1928, page 139.

Various Types of Venous Thrombosis Including Pulmonary Infarction*

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UNTIL recently the phrase, pulmonary embolism, brought to our minds at once the tragic picture of sudden death which is familiar to all who have had occasion to observe any considerable number of post-operative cases. Now, however, we have come to realize that there is a far greater number of instances of pulmonary embolism where the embolus is smaller and which produce pulmonary infarction, the great majority of which do not result fatally. It is this latter group of cases to which we want to direct your attention. In presenting this paper, no claim is made of bringing anything new on the subject before you. Our sole purpose is to recall to your mind the clinical picture of pulmonary infarction. Our excuse for this, if there need be one, is the knowledge that this condition has been overlooked or incorrectly diagnosed by us on numerous occasions in the past and our feeling is that we have not alone erred in this connection.

Some of the minor forms of pulmonary infarction are difficult to recognize. However, if the clinical picture of the more typical infarction is fixed clearly in one's mind, and if this condition is thought of when postoperative complications arise, very few of the pulmonary embolic complications will be missed. This, we feel, is important since, by recognizing the occurrence of a minor pulmonary infarction and the patient handled accordingly, a second larger and perhaps fatal pulmonary embolism can at times be avoided.

In discussing this subject it is necessary to consider venous thrombosis since our pulmonary emboli arise from thromboses in the venous system and these in turn give rise to our cases of pulmonary infarction. This clinical study was made on a series of 24 cases observed in the Holzer Hospital in the past three years. During that period out of 2,433 cases admitted to the surgical service there were 20 cases diagnosed venous thrombosis and 9 pulmonary infarction. Out of the 989 admissions to the medical service no diagnosis of venous thrombosis or pulmonary infarction was noted. This corresponds with the finding of most observers that, although venous thrombosis and pulmonary infarction is seen in

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purely medical conditions, by far the great bulk of the cases occur after some operative procedure.

Of the nine cases of pulmonary infarction in our series four showed obvious venous thrombosis while in the remaining five cases no definite evidence of venous thrombosis could be found. This also coincides with the observations of others that the emboli that cause the larger pulmonary infarctions and the cases of sudden embolic death originate in most cases from thrombosis of the deep veins where the diagnosis is generally impossible rather than from the thrombi found in the superficial veins of the extremities. Of these 24 cases eight ocurred during the year 1926, five during 1927 and 11 during 1928. The apparent increase in frequency with which these conditions occurred during the past year prompted us to review the cases.

VENOUS THROMBOSIS

Etiology. While the question of venous thrombosis has interested many observers in the past and considerable work has been done in order to determine the etiological factors involved the question is still a more or less open one since no evidence pointing to any direct cause has been obtained. There is probably always more than one etiological factor to be considered. Observers have classified these factors under two general heads, primary and secondary. Under the first are placed trauma and infection, while under the latter are placed such factors as slowing of the blood stream, changes in the blood itself, the anatomical relations of the blood vessels and changes in metabolism. Infection is thought by many to play the major role. The signs and symptoms in most cases indicate an infectious lesion of the wall of the vein with secondary thrombosis. A study of resected segments of veins in the more superficial type have shown marked inflammatory reaction in all coats of the vein and contigious tissue. The pathological picture suggests an inflammatory process on an infectious basis. It has been pointed out by observers, however, that it is hard to believe that infection plays a role in the cases that are operated on when they are apparently in the pink of condition and a perfectly clean operation is done. Still a considerable number of patients in this class develop thromboses. Traumatism, the second factor placed in the primary causes, is of course present in all surgical procedures.

W. Walters of the Mayo Clinic has brought out some interesting points in regard to possible etiological factors in this condition. He was concerned chiefly with factors following operation that tended to produce blood stasis. He pointed out that retardation of blood flow in the vessels of the abdominal cavity may result from the diminution of peristalsis which occurs subsequent to operation. At this stage because of the abdominal soreness breathing becomes chiefly thoracic. The diaphragmatic excursion is diminished and the to-and-fro pumping effect of the respiratory movements to the viscera and their blood vessels is diminished, thereby tending to retard the abdominal and visceral circulation. The enforced rest in bed following operation also tends to slow the circulation and help produce blood stasis. This, Walters thinks, also tends to lower the rate of metabolism. Acting on this theory attempts were made to increase the rate of blood flow in these patients by early movements in bed. Patients were urged to move from side to side in bed and passive movements of the extremities were carried out in an effort to increase the rate of blood flow in the inferior vena cava and its largest branches, namely the femoral veins.

Following the institution of increased movements for the post-operative case it occurred to Walters that not only might the rate of circulation be increased in this manner but that the metabolism of the patient might be increased by the administration of thyroid extract, with resulting increase in peristalsis, increased depth of respiratory movements, acceleration of blood flow, and in fact speeding up of all bodily functions. Therefore, thyroid extract was given by mouth in 2 grain doses three times daily, beginning on the third or fourth day postoperative and continuing until the patient was out of bed. No deleterious effects were noted. In a period covering two years thyroid extract was employed in 1,745 cases in which major operations were performed and in no case did a patient die of pulmonary embolism.

Signs and Symptoms. The symptoms and physical signs associated with a venous thrombosis are too well known to discuss in detail. Pain is one of the first to appear and probably the most constant symptom noted. It is apt to be acute and often requires an opiate for its control. It is often described as a deep boring pain or as a dull ache. It is generally aggravated by active or passive motion of the affected limb. Tenderness along the course of the vein occurs early, often being the first symptom noted. If not appearing first it generally follows the appearance of pain quite promptly. Brown, of the Mayo Clinic, in a study of 87 cases regards it as the most important single sign of phlebitis. Tenderness occurs most commonly in three localities. These, in order of their frequency are, the middle of the calf of the leg or the lower popliteal region, the lower femoral region, and the upper femoral region. The thrombosed vein can frequently be felt as a hard tender cord. Swelling may or may not occur. Brown reports it in only 50% of his series. It occurred much more frequently in our series. The exact percentage cannot be given due to the rather incomplete notes on some of the older cases. It generally follows the pain and tenderness promptly and may be slight or marked according to the vein involved. It is, of course,

limited to the area supplied by the vein thrombosed. In saphenous vein thrombosis swelling is found in the ankle and lower leg, in popliteal thrombosis in the lower leg, and in femoral vein thrombosis it is apt to extend throughout the length of the whole leg. When the more superficial veins are involved and there is a good collateral circulation present there may be no edema although there is a very obvious thrombosis present. A rise in temperature is seen with the thrombosis in a large percentage of the cases. It occurred in 85% of our own cases and Brown reports it as occurring in 89% of his series. As a rule this is of an irregular type and the maximum in our series was 102°. The average is 100° to 101°. In the majority of cases the temperature rise follows the initial symptoms of pain and soreness, although in three of our cases the rise began from 24 to 36 hours before the onset of any symptoms. The fever lasts from one to ten days, averaging around three days. There is a slight tendency to increase in the pulse rate. A slight leucocytosis in these cases is reported by some observers, the count averaging 11,000.

Site of Thrombosis. In the great bulk of the cases of thrombosis the veins of the lower extremities are the ones found to be involved. In the cases involving the legs the great majority are found in the left leg. Brown, in his series, reported 64% occurring in the left leg, 16% in the right leg and 20% in both legs. In our series 73% occurred in the left leg, 15% in the right leg and 10% had both legs involved. While thrombosis occurs in the great bulk of the cases in the legs still other vessels are frequently involved. Of these the veins of the pelvis and neck are most frequently found implicated. In a recent paper Bernheim has called attention to thrombosis of these deeper vessels. This he calls the concealed thrombus. Diagnosis of this condition is almost never made and seldom even suspected. These are the cases that are the most serious from the standpoint of pulmonary complications. Here the fragments that may be dislodged are much larger than those that originate in a femoral or saphenous thrombosis.

Hampton and Wharton have shown conclusively however by autopsy records that fatal emboli may have their source in either the femoral or saphenous veins. Thomas in a recent report from the Brady Urological Clinic reported five cases of fatal pulmonary embolism where the embolus was said to have originated from a femoral thrombosis. It is generally agreed, however, that the concealed thrombus is the one from which the serious pulmonary complications are apt to arise while thromboses of the femoral and saphenous veins are as a rule benign. Unfortunately, there is no clear-cut clinical picture of these cases of concealed thrombosis. It should always be thought of however, when there is a mild post-operative fever that cannot be satisfactorily explained. Wharton states that the patients who develop thrombosis are very apt to show a low persistent type of fever from shortly after the operation up to the time of the appearance of the thrombosis. Some observers have even stated that in patients who have a perfectly normal temperature curve following operation, thrombosis and embolism do not need to be feared. Therefore, it would seem logical to consider all patients with a persistent mild post-operative fever that cannot be explained as possible cases of venous thrombosis and handle them accordingly.

PULMONARY INFARCTION

Books on pathology generally describe a hemorrhagic infarct of the lung as a cone-shaped area with the base out and the apex pointing toward the hilum of the lung. It produces a raised surface upon the visceral pleura which, in the early stages, is smooth and glistening. This soon becomes covered with a fibrinous exudate which often gives rise to a friction rub as does a fibrinous pleurisy. The infarct on section presents a dark purplish-red color and the tissue, while solid, is rather friable. The edges of the infarct are generally surrounded by an inflammatory zone. The vessels leading to the area are found plugged by thrombotic emboli. The area is airless, the alveolar spaces being filled with red blood cells and a few leucocytes. The process generally goes on to absorption and reestablishment of the circulation although necrosis or cicatrization may occur. If the emboli causing the process are infected or if there is any infection in the lung tissue at the time of infarction abscess formation or gangrene may result.

Obviously the size of the embolus determines in great measure the pathological picture occurring in the lung. The position of the artery occluded; the condition of the pulmonary circulation and the presence of infection in either the lung or the embolus are also less important factors. Feebleness of the pulmonary circulation, emphysema and infectious processes in the lung all favor the occurrence of pulmonary infarction. Karsner and Ash report that very small sterile emboli when introduced into the pulmonary artery, produce in normal lungs only demonstrable lesions when they lodge in vessels that are situated along the angular borders of the lobes. However, if pulmonary stasis and congestion are present due to impairment of the pulmonary circulation emboli of the same size produce infarction wherever they may lodge. In this light it is interesting to note that the smaller pulmonary infarctions are always found at the base in the angular margin of the lung where passive congestion is first seen.

Wharton divides the postoperative embolic phenomena into three general groups: (1) Grave pulmonary embolism due to large emboli, causing more or less complete occlusion of the pulmonary

artery or its main branches, cutting off the circulation of more than one lobe, producing acute widespread pulmonary edema without hemorrhagic consolidation of the lung, and terminating fatally in 90% of the cases; (2) Pulmonary infarction, due to moderate sized emboli, not large enough to occlude the main trunks of the pulmonary system but completely occluding the smaller vessels in which they lodge, causing hemorrhagic consolidation and pleurisy and producing characteristic clinical signs and symptoms, with a mortality of 15 or 20% (3) Pulmonary embolism with incomplete infarction, due to very small emboli which lodge in the pulmonary system and produce a characteristic, but mild, course of symptoms with very few if any physical signs. He reports no death in this latter group.

CLINICAL PICTURE OF INFARCTION

Symptoms. If one will remember that this is an embolic condition and therefore that the onset is sudden and the symptoms of maximum intensity at the onset when there are practically no physical signs present it will help materially in differentiating it from other post-operative chest conditions. The majority of cases appear during the second or third week following operation. The attack is generally ushered in by a sudden sharp pain in the side. Two of our cases were awakened from a sound sleep by this pain. It is probably the most constant and outstanding symptom. It was found in all our cases. It usually occurs along the costal margin anteriorally or in the axilla, sometimes below the scapula posteriorally. It is often very severe, makes breathing very painful and not infrequently causes great anxiety to the patient with fear of impending death.

There is often an accompanying dyspnoea which is caused by the patient's inability to breathe deeply because of the severe pain. Cough is frequently present but is rather a minor symptom. It is more apt to be of the dry, hacking unproductive type such as one frequently sees with a pleurisy. When sputum is present it is frequently sanguinous in type. This is given by many as the characteristic finding in pulmonary infarction. It is more apt to be present in the larger infarctions especially where there is more or less associated pulmonary edema. If one waits for the appearance of sanguinous sputum for a diagnosis many of the smaller infarctions will be missed. In our series it was found in five of the nine cases, all these being where the area of infarction was quite extensive. Hampton and Wharton found this symptom in only 36% of their large series of cases. When it is present it makes the diagnosis practically certain.

Temperature Curve. In almost all instances we find a low febrile course preceding the onset of the infarction. This is thought to be due to the presence of a thrombosis. With the appearance of infarction there is a decided rise in the temperature curve. The first day the temperature is generally between 99° and 100°. The second, third and fourth days as a rule show the highest fever, the temperature at this stage reaching 101° to 103°. It is of the irregular hectic type and in most cases reaches normal by the end of a week, frequently by the end of the fourth or fifth day.

Course. The great majority of infarction cases after the second day begin to show signs of improvement. The pain becomes less severe, the temperature gradually falls, the breathing becomes slower, deeper and less painful and the restlessness and anxiety disappears. After five days to a week have elapsed the patient is generally quite comfortable although their physical signs at this stage are apt to be as marked as at any time during the course of the infarction.

Physical Signs. The characteristic thing to remember here is that very little in the way of physical signs are to be found during the first twenty-four hours. If any are found they are very slight and the severity of the symptoms are out of all proportion to the physical signs in the early stages of the attack. By the end of the second day, however, if the infarction is of any considerable size, definite abnormal physical signs will be found over the area involved. Most observers give the friction rub as the most constant of these. Hampton and Wharton found this present in 75% of their cases. We found it much less frequently, it being noted in only three of our nine cases. Impaired resonance was noted much more frequently in our cases, it being found in seven out of nine. Rales are heard in the majority of cases. These are generally of the fine crepitant variety. Two of our cases developed typical tubular breathing but this was not noted until the fourth or fifth day when the symptoms were subsiding and the temperature curve was showing a downward trend. These two cases showed extensive areas of infarction. These physical signs persist long after the symptoms have entirely disappeared, frequently lasting two to three weeks.

An accompanying venous thrombosis is always strong confirmatory evidence of an infarction. It is regarded by most observers equally as important as the appearance of sanguinous sputum. It was present in five of our nine cases, but in two of these appeared after the onset of the pulmonary infarction. The remaining cases showed no obvious thrombosis although two of this number complained of severe pain in the back and legs a few days previous to the infarction, accompanied by an elevation of temperature. This suggested to us the possibility of thrombosis of the pelvic veins.

X-ray Findings. The *X*-ray has seemed to us to furnish very important aid in the diagnosis of this condition. A positive shadow was found in

six of our nine cases, a clearly negative chest in one, and in two cases no *X*-ray was taken. Very little was found in the literature concerning the Roentgenological diagnosis of this condition. If it affects a sufficient area it is said to cast a perceptible shadow. This shadow is not very opaque and does not usually have clearly defined outlines. It is usually not the typical triangular shape described by the pathologist. It is generally in the lower pulmonary field, most frequently in the costo-phrenic angle, and may have a fuzzy outline which is probably due to an inflammatory zone around it. The density of the shadow is much less than that seen in lobar pneumonia or pleural effusions and more like the density noted in bronchopneumonia.

When the infarcts are rather extensive the lung about them may be in such a state of inflammatory reaction that it may suggest a bronchopneumonia. This latter condition was observed in our two cases showing large areas of infarction. Here, when the film was obtained in the first few days following the infarction, the lung on the affected side showed a rather diffuse patchy mottling that suggested a bronchopneumonia. A film made a week or so later on the same patients was seen to show the more triangular shaped shadow in the costo-phrenic angle. This shading of the costo-phrenic angle in moderate sized infarctions usually appears in the first twenty-four hours of the attack at a time when no physical signs have developed. Therefore, it serves as a valuable aid in diagnosis. Wharton and Pierson lay considerable stress on the pleural changes in this condition. These are noted as appearing from the fourth to the tenth day and are indicated by a network of fine lines which appear superimposed over the area of increased lung density. They state that these signs of pleural involvement were always found no matter how small an area of the lung was involved and always persisted for a much longer time than the lung condition. This would indicate a rather marked pleural involvement.

Differential Diagnosis. The conditions from which pulmonary infarction must be differentiated are pleurisy, pneumonia, tuberculosis, empyema, gangrene and abscess of the lung. Of these the first two are most often confused with the condition under consideration. The post-operative inflammatory conditions, however, as a rule develop much earlier, generally the first two or three days following operation, while the embolic conditions seldom occur before the second or third week following the surgical procedure. The pneumonias and bronchitis are generally accompanied by more cough and almost always by a considerable amount of rather characteristic sputum. Cough is a relatively unimportant symptom in infarction and when sputum is present it is apt to be of the frothy sanguinous type.

The temperature curve in infarction rises rather slowly, does not reach a very high level, is irregular in type and lasts for only a few days as a rule. In the pneumonias the rise is more marked at the onset of symptoms, is maintained at a higher level and lasts, as a rule, for a longer period of time. Suspected pleural effusions can be ruled out by an exploratory puncture. The sanguinous sputum makes one think of a possible tuberculosis at times. The character of the sputum, however, is generally quite different and the apical involvement in tuberculosis as against the basal involvement in infarction helps in the differentiation. Bronchitis really offers very little confusion. The absence of pain and friction rub, the distressing cough with abundant mucopurulent sputum makes the differentiation as a rule simple.

TREATMENT

In the discussion of treatment any measures that appear to aid in the prevention of venous thrombosis must be considered of great importance. The routine outlined earlier in this paper as reported by Walters we believe to be of real value. Active and passive movements of the extremities should be instituted in post-operative cases as soon as possible following operation and the patients should be urged to turn from side to side in bed. Thyroid extract should be given in 2 grain doses three times daily beginning on the third post-operative day and continuing until the patient is out of bed. The patients should be watched for evidence of too much of the drug and if nervousness and tachycardia develop the dosage can be reduced or discontinued.

Where thrombosis has developed the affected limb should be elevated and quiet maintained. Massage is of course contraindicated. Heat is applied locally or the member wrapped in cotton and lightly bandaged. Guiacol and lanolin ointment applied locally at times appears to give the patient some increased comfort. The average length of treatment is about two weeks although many cases last much longer. In some cases residual edema is found several months after the onset of the thrombosis. These cases are advised to carry out postural exercises as advised for obliterative arterial disease. These consist of elevating the leg to an angle of 180° for one minute, lowering it for a minute over the side of the bed, and then letting it rest in the horizontal position for two minutes. These exercises should be repeated ten times and the series two or three times daily until the postural edema has disappeared. If these measures do not suffice then bandaging is advised.

The treatment of pulmonary infarction is chiefly symptomatic. For the pain some opiate is definitely indicated. We never hesitate to use morphia and atropine in sufficient doses to keep the patient comfortable until the severity of the initial symptoms subside. The anxiety and restlessness of the patient must be controlled in order

to guard against a possible second and perhaps fatal embolism. The movements of the affected side may be lessened by strapping it tightly with strips of adhesive. This helps to lessen the pain of breathing. Stimulants such as strychnia and caffein are at times beneficial, especially in tiding the patient over the shock of the initial symptoms. In patients who show a more or less weakened myocardium digitalis is of benefit. In these cases the added strain placed on the heart muscle due to the infarction is often sufficient to bring on decompensation. Careful observation, with frequent encouragement does a great deal to quiet these patients and this is of prime importance in the management of the cases. The period of rest must, of course, be lengthened in these patients. They should be kept in bed for from ten days to two weeks following the subsidence of the fever and then allowed up very gradually. Ne permanent damage to the lung or pleura has been reported following infarction.

SUMMARY

Pulmonary emboli not sufficiently large to cause sudden death but which do cause pulmonary infarctions of various degrees are a relatively common post-operative complication.

The attacks are characterized by a sudden onset and the symptoms early in the attack are out of all proportion to the physical signs.

The clinical picture of pulmonary infarction is quite characteristic and the condition should be easily differentiated from the post-operative infectious pulmonary complications.

Venous thrombosis must be recognized or, if possible, prevented in order to protect the patient from embolic pulmonary complications.

The *X*-ray is an important aid in the diagnosis of pulmonary infarction, and helps materially in the differential diagnosis.

It is of the utmost importance to recognize the minor forms of pulmonary infarction in order that the patient may be treated accordingly and a second and perhaps fatal pulmonary embolism avoided.

REFERENCES

1. Wharton and Pierson. The Minor Forms of Pulmonary Embolism After Abdominal Operations. Jour. A. M. A. Vol. 79, pp. 1904.

2. Hampton and Wharton. Venous Thrombosis, Pulmonary Infarction and Embolism Following Gynaecological Operations. J. Hopkins Hosp. Bull. Vol. xxxl, No. 350. April, 1920.

3. Henderson, Earl F. Fatal Pulmonary Embolism. Arch. Surg. Vol. 15. pp. 231. 1927.

4. Allen, E. V. Changes in the Blood in Pulmonary Embolism. Following Operation. Arch. Surg. Vol. 15. pp. 254. 1927.

5. Rosenow, E. C. Bacteriologic Study of Pulmonary Embolism. J. Infect. Dis. Vol. 40. pp. 389. 1927.

6. Walters, W. Suggested Use of Thyroid Extract to Reduce the Incidence of Post-operative Embolism, Preliminary Report. Minnesota Med. Vol. 10, pp. 25. 1927.

7. Brown, Geo. E. Postoperative Phlebitis. Arch. Surg. Vol. 15. pp. 245. 1927.

A Preliminary Report of Clinical Experience with Otitis Media and Mastoiditis in Infancy*

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THE role played by suppurative otitis media in infancy early attracted the special interest of students of clinical medicine. In 1899 Hartmann, and 1921 Renaud and Preysing studied this infection in infants with special reference to its relation to severe gastro-intestinal symptoms. More recently, presumably the same clinical entity has attracted the attention of Marriott, Dean, Jeans, Floyd, Alden, Claussen, Hunter, Dowling, Hartmann, McNeil and Mitchell and associates.

A review of otitis media in six hundred and thirteen infants under two years of age has been made. These patients were observed during the last three years at either Babies and Childrens Hospital or on the Pediatric Service of Cleveland City Hospital. They included all the patients among two thousand consecutive admissions in whom suppurative otitis media was demonstrated by myringotomy, post-auricular drainage or autopsy.

An effort was made in the analysis of these cases to determine the variation of the signs and symptoms of this disease in different age groups. The occurrence of gastro-intestinal symptoms and the effectiveness of post-auricular drainage in treatment received particular attention. This series included:—

Twenty-one premature infants under one month of age,

Thirty-one premature infants over one month of age,

Twelve full-term infants under one month of age,

Sixty-six full-term infants one to three months of age,

One hundred and twenty-three full-term infants three to six months of age,

Two hundred full-term infants six to twelve months of age,

One hundred and fifty-nine full-term infants twelve to twenty-four months of age.

Fever was the most common symptom. However, there were fifteen patients in whom this symptom was absent. It is well to say that the absence of temperature reaction was uncommon in hospital practice where temperatures were taken every three hours, but probably it would be seen more often in dispensary practice where patients are seen once a day or at less frequent intervals. In hospital practice there were quite

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a number of patients who showed relatively mild febrile reactions, that is, under 101° F. and then only once or twice during the twenty-four hours. There were a few patients, desperately ill and usually markedly dehydrated, whose temperatures were subnormal.

There were some patients in whom fever was the only symptom. The ear drums in this type were definitely pathological. The fever disappeared after myringotomy and drainage of pus. Otitis media is frequently a cause of otherwise unexplained fever, either because the condition is not thought of and the drums are not inspected, or because the drums are considered negative or only slightly abnormal. Perhaps, sometimes, we are too prone to think of less common possibilities such as tuberculosis.

Vomiting was another frequent symptom. It was a far more frequent symptom in infants under six months of age. It was usually accompanied by more or less anorexia. There were about ten young infants in whom the vomiting was so severe that probable diagnoses of pylorospasm were made. Such a case is reviewed:

A patient six weeks of age was brought to the hospital with the complaints of projectile vomiting and constipation of three weeks duration. The patient had a definite gastric wave. Atropin was given without success. After an observation period of fifteen days, because of fever and suspicious ear drums a bilateral myringotomy was performed and pus obtained. There was some temporary improvement but later the patient became worse and a diarrhea developed. Postauricular drainage was followed by almost immediate improvement. The patient was discharged four weeks later having gained three pounds. The mastoid wounds were healed and the ears had ceased draining.

In such a case there are at least two reasons for believing that the presence of infection in the middle ear and mastoid antrum caused fever and vomiting, (1) the relatively prompt cessation of vomiting and lowering of fever after operation, and (2) the absence of other demonstrable infection. Six others with such symptoms were treated by post-auricular drainage and similar results were obtained.

It is a matter of opinion whether the vomiting might have caused the otitis media, but the improvement following operation would indicate that the continuation of the vomiting in all probability was the result of the infection.

According to Hecht there are at least two anatomical peculiarities of the Eustachian tubes of young infants that lend themselves well to the entrance of infection into the middle ear. The pharyngeal opening of the tube is definitely lower in the infant than in the adult, in many cases being on a level with the soft palate or the root of the uvula. The course of the canal is relatively short and straight. Rarely does the length exceed one half inch and its straight course facilitates the entrance of foreign infective material from the pharynx. Additional facts favoring frequent infection through this route are: the pharynx contains a multitude of potentially pathogenic organisms, and the incidence of vomiting is high in early infancy.

Diarrhea occurred in 50 per cent of the patients with suppurative otitis media during the first six months of life. In the older infants the frequency of severe diarrhea was less. After eighteen months it was of unusual occurrence. It has long been recognized that diarrhea may accompany infections occurring outside of the gastro-intestinal tract. This type of diarrhea when occurring in a mild way is commonly accepted as a parenteral dyspepsia but in a more severe form, as has been pointed out by Finklestein, Marriott, and others, it may stimulate the condition called "acute intoxication", and it is then accompanied by vomiting, marked dehydration, fever, and disturbances of circulation and respiration.

A number of patients illustrate this relationship between otitis media and diarrhea; for instance, there were patients who had fever, vomiting, diarrhea, and bulging ear drums. With myringotomy the fever, vomiting and diarrhea disappeared. The diarrhea developed again and the vomiting and fever recurred, when the ears ceased draining, to again disappear upon reopening the ears.

Diarrhea of this type did not show the presence of pus and blood and was differentiated in this manner from infectious ileo-colitis. The latter condition was encountered more often in infants over six months of age and usually continued after myringotomy was done. It is probable that the otitis media in these cases was present as a complication of the enteral infection.

Failure to gain or actual *loss of weight*, as would be expected, occurred almost regularly in those patients who had anorexia, vomiting or diarrhea. In three patients it occurred to the point of extreme malnutrition.

An infant nine weeks of age had gained only three ounces over a period of one month. No fever was observed during this period of time. Observation after admission to the hospital showed slight inconstant fever and suspicious ear drums. Incision of the drum membranes yielded gross pus which was present for ten days following myringotomy. The infant gained two pounds during the three weeks following this procedure. Development and growth have remained normal for seven months.

Dehydration, and in some cases an accompanying acidosis, almost uniformly paralleled the severity of the gastro-intestinal disturbances. This condition was found much more frequently and in a more severe form in infants under six

months of age. It was of rather infrequent occurrence in infants over one year of age.

There were several patients in the state of acute anhydremia with severe acidosis whose mastoids were opened soon after admission to the hospital because of opinions expressed in the recent literature. In this group there were very few patients who made recoveries. Some of them though pus had been recovered on myringotomy, showed very little involvement of the mastoid cells at operation. It is thought possible that a sepsis was the cause of the severe symptoms and the almost universally poor result following operative therapy. Blood cultures were not taken uniformly enough to prove or disprove this impression.

An infant six months of age was admitted because of a relatively severe eczema, without fever and with no other demonstrable abnormality. After about one week the patient suddenly developed fever, a severe watery diarrhea, became acutely dehydrated, and was markedly prostrated. The ear drums which had been considered normal became red and somewhat full. Immediate myringotomy was done but resulted in no improvement. Serous pus was obtained on myringotomy. Because the infant was worse and in the hope of obtaining more adequate drainage a post-auricular opening was made. A small amount of the same kind of pus was found in the middle ears and antrums at operation. No improvement followed this therapeutic measure and the infant died within forty-eight hours of the onset of his acute illness.

Collapse and syncope or acute loss of consciousness, as described by Jeans, also occurred more frequently under six months of age. It has been reported that mastoiditis is a cause of *sudden death* in infancy. Five patients of this series who died suddenly and unexpectedly showed extensive involvement of the mastoids as the only pathological finding at autopsy.

Our series of patients with suppurative otitis media was surveyed with reference to the incidence of concurrent infection. The most outstanding finding was the large number of premature and young infants in whom there was no demonstrable infection other than otitis media. Nasopharyngitis or some other respiratory infection was by far the most frequent type of concurrent infection.

That otitis media is of *frequent occurrence* and of great importance both as to life and development in early infancy, cannot be doubted as this condition was found in six hundred and thirteen infants among two thousand consecutive admissions under two years of age. This figure probably does not represent the true incidence of otitis media in such an age group, as, no doubt, some cases were not diagnosed.

The foregoing presentation indicates the great variety of syndromes which may occur as the result of a suppurative otitis media. It is common knowledge that these syndromes might have been duplicated by other diseases.

This leads to a very pertinent consideration. How is one to determine when middle ear disease causes generalized symptoms? It must be realized that otitis media is a frequent cause of illness among infants. In addition it must be appreciated that an otitis media in infancy may show very few local signs. Any ear drum which does not show a luster or a definite light reflex may contain pus under tension. Red and bulging ear drums do occur but such extensive signs are seldom evident in early infancy. Slight local changes can be best seen and often only seen in premature and young infants by the use of the modern otoscope. The importance of slight local changes can be judged only in relation to the systemic symptoms and after the evaluation of all other disease processes present at the same time. In our experience the answer to the above stated question often has been a very baffling problem.

There were several patients who had diagnoses of pneumonia made by more than one observer but whose symptoms disappeared promptly upon myringotomy and drainage of pus from the middle ear. Roentgenograms of the chests of these patients did not confirm the original diagnoses of pneumonia. A similar case is vividly recalled in which the autopsy showed pus and necrosis in the mastoid and no pneumonia.

Another case had suspicious ear drums and every symptom of intestinal obstruction and at autopsy showed a purulent otitis media as the only pathological finding. In this connection we may recall the cases that simulated pylorospasm.

It is freely admitted that a number of ear drums have been opened which revealed no pus. Hecht says that the danger of producing otitis media by myringotomy is slight. Our experience has been quite similar, because ears which showed no pus on microscopic examination at the time of the first myringotomy showed none subsequently. To be convinced of this fact, we feel that it is necessary to make smears and examine these microscopically when ears are first opened and at intervals thereafter.

The drum membrane heals very quickly in early infancy. It is therefore important to make the original opening an incision rather than a puncture wound and it is usually necessary to repeat the myringotomy frequently in order to maintain adequate drainage and prevent recurrence of the systemic symptoms. We feel that drainage of pus through a properly placed incision is to be preferred to spontaneous rupture or inadequate drainage. By frequently repeating the myringotomies, we feel that in the majority of cases, adequate drainage can be maintained,

thus often eliminating the necessity of post-auricular drainage.

The patients who have had suppurative otitis media without evidence of the discharge becoming less in amount are benefited oftentimes by post-auricular drainage. Post-auricular drainage is also definitely indicated in patients whose systemic symptoms have not improved satisfactorily with repeated myringotomies. There are possibly a few desperately ill patients in whom no other disease can be demonstrated, where this procedure produces striking results.

At the present time there is no doubt in our minds that post-auricular drainage is of definite value in a large number of patients.

Due to the difficulty encountered in diagnosing mastoiditis or antrum disease, we have taken a large number of *roentgenograms*. A few have been of definite value but most of these have been useful only in a corroborative role.

The greatest difficulty has been to secure consistently good plates. The lack of standards for comparison may be a less serious difficulty in the future. Mastoid cells as shown by the roentgenograms and demonstrated by operation or autopsy show great individual and age variations. Roentgenograms are almost useless in infants under four months of age. These statements are based on a study of the roentgenograms of one hundred and ninety cases. Many of this number were checked by operation or autopsy.

SUMMARY

1. A study was made of six hundred and thirteen cases of suppurative otitis media occurring in two thousand consecutive hospital admissions —in infants under two years of age.

2. Fever was found to be an almost universal symptom of this disease in all age groups. Diarrhea and vomiting occurred in 50 per cent or more of the premature and young infants. Anhydremia was most frequently encountered in infants under six months of age. Syncope and prostration occurred occasionally in all age groups but somewhat more frequently in the premature and young infants.

3. Concurrent infections were definitely less frequent in infants under three months of age.

4. Myringotomy resulted in prompt improvement in most of the patients. It was usually found necessary to repeat the myringotomy frequently in order to prevent recurrence of systemic symptoms.

5. Post-auricular drainage was found necessary and beneficial in cases where adequate drainage could not otherwise be obtained or where adequate drainage seemed immediately essential.

6. Otitis media should be considered more often in the treatment of premature and young infants showing gastro-intestinal symptoms or fever.

7. As an indication for post-auricular drainage systemic symptoms were of greatest importance; local external signs were of little importance because they were rarely encountered. In our experience roentgenographic evidence was usually of uncertain value.

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BIBLIOGRAPHY

1. Alexander, vii. 109. P. Vogel, Leipzig, 1927.
2. Dixon—Jour. Amer. Med. Ass'n., 1928, xci, 1280.
3. McNeil—Can. Med. Ass'n. Jour., 1928, xviii, 689.
4. Hartman—Am. Jour. Dis. Child., 1928, xxxv, 557.
5. Dowling, Northwest. Med., 1928, xvii, 472.
6. Friesner & Rosen—Arch. Otolaryng., 1928, vii, 317.
7. Editorial Jour. Amer. Med. Ass'n., 1928, xc, 2022.
8. Hunter—Arch. Ped., 1927, xliv, 205.
9. Jeans-Floyd—Jour. Amer. Med. Ass'n., 1926, xxxxvii, 220.
10. Claussen—N. Y. State Med. J., 1927, xxviii, 23.
11. Smith—Am. Jour. Dis. Child., 1924, xxviii, 1.
12. Marriott—South. Med. Jour., 1926, xix, 157.
13. Alden—South. Med. Jour., 1926, xix, 360.
14. Spahr—Am. Jour. Dis. Child., 1929, xxxvii, 541.
15. Hecht—Julius Springer, Vienna, 1928.
16. Mitchell, McCarthy, Leichliter, Seinsheimer—Jour. Amer. Med. Ass'n., 1929, xcii, 970.

BOOKS RECEIVED

Grenz Ray Therapy. By Gustav Bucky, M.D., New York. With contributions by Dr. Otto Glasser, Cleveland, and Dr. Olga Becker-Manheimer, Hamburg. With forty illustrations in the text. Translated by Walter James Highman, M.D., New York. The Macmillan Company, New York.

The Newer Knowledge of Nutrition. The use of Foods for the Preservation of Vitality and Health. By E. V. McCollum, Ph.D., Sc.D., Professor of Chemical Hygiene in the School of Hygiene and Public Health, of the Johns Hopkins University, Baltimore, Md., and Nina Simmonds, Sc.D. (Hygiene), formerly Associate Professor of Chemical Hygiene in the School of Hygiene and Public Health, of the Johns Hopkins University, Baltimore, Md. Illustrated. Fourth edition, rewritten. The Macmillan Company, New York.

Modern Methods of Treatment. By Logan Clendening, M.D., Professor of Clinical Medicine, Lecturer on Therapeutics, Medical Department of the University of Kansas; Attending Physician, Kansas City General Hospital; Physician to St. Luke's Hospital, Kansas City, Missouri. With chapters on special subjects by H. C. Anderson, M.D.; J. B. Cowherd, M.D.; H. P. Kuhn, M.D.; Carl O. Rickter, M.D.; F. C. Neff, M.D.; E. H. Skinner, M.D.; and E. R. DeWeese, M.D. Third edition. The C. V. Mosby Company, St. Louis.

The Blood Picture and Its Clinical Significance. (Including Tropical Diseases.) A Guidebook on the Microscopy of Blood. By Professor Dr. Victor Schilling, Physician-in-Chief, the first Medical University Clinic Charité, Berlin. Translated and edited by R. B. H. Gradwohl, M.D., Director of the Pasteur Inst. of St. Louis and the Gradwohl School of Laboratory Technique. Seventh and Eighth Revised Edition, with 44 illustrations and four color plates. The C. V. Mosby Company, St. Louis.

General Medicine. Of the Practical Medicine Series, 1929, comprising eight volumes on the year's progress in medicine and surgery. Edited by George H. Weaver, Lawrason Brown, George R. Minot, Wm. B. Castle, Wm. D. Stroud and Ralph C. Brown. The Year Book Publishers, 304 South Dearborn St., Chicago.

An Unusual Sequela of the Intracapsular Extraction of the Cataractous Lens

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I HAVE entitled this report an unusual sequela of the intracapsular extraction of the cataractous lens. I believe this title to be appropriate and quite in accord with the facts. However, the word intracapsular might have been omitted justly.

In cataract work the result of the operation is usually permanent, be it good or bad. However there are cases in which complications develop within four to eighteen months after the operation. Among these there is an unusual type of sequela which I have observed seven times in approximately thirty-five hundred operations. In such cases the patient returns after a few months with a statement that the vision does not seem as clear as it has been.

The first examination reveals a change in the appearance of the surface of the vitreous covering, visible through a pupil which reacts to a midriatic. A comparatively smooth, sometimes pearl-like surface is to be seen. Early the pink retinal reflex shows through, and the fundus may be seen as through a foggy vitreous. As one examination follows another, this reflex becomes less and less distinct until finally it is lost entirely as the membrane becomes more dense. During the earlier stages while it is yet possible to see through it, the proximal surface remains constantly smooth, but the distal or vitreous side shows lines which are darker than the other parts of the membrane, seeming to dip into narrow spaces in the vitreous. Eventually the membrane becomes almost opaque, and the patient retains only perception of light.

The following is a comparatively brief report of the seven cases which have come under my observation, four of which occurred in the practice of Dr. D. W. Greene and three in my own practice.

These first four cases were in the practice of Dr. Greene and quantitative analyses were not made.

CASE 1.—Mrs. F. C., age 58, widow, mother of four healthy children. Urine has shown sugar, varying in quantity, during several years with occasional traces of albumin. Always acid. Mature cataract of both eyes. Vision perception of light at time of operation. O.S.V. one year before was vision at two feet.

Four months later she reported vision growing misty. Ophthalmoscope revealed slight haziness of hyaloid. This grew denser until at six months, vision was reduced to fingers at three feet. A discission was performed. Vision immediately improved but after a week was as poor as before or worse. Treatment did not improve condition.

CASE 2—Miss E. G., age 62, O. U. mature cataract. O.S.V.P.L. perception and projection good, pupil reacts to light.

October 7th, 1909. Intracapsular extraction. Vitreous presented but no loss. Healing slow, slight iritis. After three weeks vision with correction was 20/50; this improved to better than 20/40 after eight weeks.

One year later a membrane began to form and vision reduced to P. L. A discission was performed, immediate result was a considerable improvement which lasted two weeks, after which the membrane grew seemingly as dense as before. Another discission was made which did not improve the condition. This was followed by considerable and continued inflammation of the anterior structure of the globe. Enucleation followed.

CASE 3—Mr. A. J., age 78, O.U. Mature cataract. Perception and projection good and pupil active. Trace of sugar in urine; had had this condition for some time.

April 23, 1911, an intracapsular operation was performed on O.S. No accidents. Recovery uneventful. When refracted six weeks later vision was 20/20 and he read Jaeger 1 easily. Nine months afterwards a membrane began to form, and after sixteen months vision was down to objects at two feet. Urinalysis showed sugar present. No operation was performed.

CASE 4—Mrs. A. L., Colored, widow, age 57. O.U. Mature cataract. Perception and projection good and pupils react.

December 4th, 1912, an intracapsular operation was done on O.D. No accidents and an uneventful recovery. She had been treated previously for glycosuria. Vision with correction was 20/100. After six months, membrane began to form and took a like course as the three reported above. No operation was performed.

The above four cases were in the practice of Dr. Greene. After his second failure to improve vision by operative procedure he remarked, "Don't interfere with a membrane over the vitreous unless you know it to be a retained capsule."

In my own practice I have had three cases of similar nature.

CASE 1—Mr. C.S., age 68, O.D.V.P.L. O.S.V. 5/200 O.D. mature cataract. O.S. not quite so dense. Vision has been growing duller during several years. General health has always been good. "Never been real sick". Says he had sugar diabetes several years ago.

P. and P. of each eye good and both pupils active.

April 12, 1914, operated on O.D. an intracapsular operation. The lens was delivered under side up—a so-called tumbler. No accidents. Healing uneventful and discharged from the hospital on sixth day. Refracted three weeks later with 20/20 and Jaeger 1, result.

June 3, 1915, reported vision failing. Ophthalmoscope and corneal microscope, revealed vitreous membrane forming. A pearly gray reflex from the anterior surface with darker lines on inner surface. Blood sugar at this time was 1.08. Diet and general treatment kept him from blindness for two years. He died of diabetes in 1917, still able to count fingers at eighteen inches.

Read before the Eye, Ear, Nose and Throat Section, Ohio State Medical Association, at the 83rd Annual Meeting, Cleveland, May 7-9, 1929.

CASE 2—Mr. J. B., age 87, consulted me January 9, 1919. O.U. mature cataracts. Vision objects at two feet. Stated that he had been refused an operation, because of diabetes. He and his family insisted so I consented to operate after informing them that an operation might improve his vision and certainly could make the left eye no worse. Since there was nothing to lose and everything to gain, it was probably worth the risk.

January 18, smears negative for bacteria. Urine showed trace of sugar. Blood pressure 186/120. January 20, we did an intracapsular extraction, without accident or complication. Wound healed slowly without any undue inflammation.

February 5, he left hospital.

March 31, vision with +11.00 +2.00 Ax. 180 was 20/50.

His home was in New York City and I did not see him until January 3, 1921, at which time a rather dense membrane had formed. He stated that his vision had been very satisfactory until about four months before, when the dimness began and it had gradually increased. He died in November, 1928, at the age of 96. He retained vision enough in the operated eye to see to get about with a very little help.

CASE 3—Mr. R.B.C., age 65, came to see me July 21, 1921. O.D.V.P.L., P. and P. good and pupil reacts nicely to light. At various times during the past few years had had some sugar in urine. O.S.V. about the same as O.D. July 28, 1921, blood pressure 160/110. Urine negative for sugar and albumin. Smear negative for pus and bacteria. Cocaine anesthesia. Intracapsular extraction. No accidents or complications. August 3, 1921, left hospital with eye in good condition. August 16, eye healed nicely. Complained of general feeling of languor. Advised him to consult his physician.

October 7, O.D. +13.00 +1.00 Ax. 180 V.20/40 with +3.00 added, read Jaeger No. 2, April 13, 1922, vision dull. Membrane forming. Trace of sugar in urine. I advised against operative measures. Prescribed instillation of 10% solution of dionin morning and evening.

October 28, 1922, membrane quite dense. Tension normal. Vision objects at two feet, dimly. He reported that he had consulted two oculists in neighboring cities, who did not agree with my diagnosis and prognosis. They both believed he had a retained capsule, and that discission would restore vision. With my consent he was operated upon by the second consultant, a most efficient surgeon who reported as follows:

"I operated on Mr. C. five days ago, performing a careful discission. I made a horizontal incision through that membrane in the axis of vision clear across the pupil and a vertical incision to join it. I was impressed with the fact that the membrane did not spring open like it does when it is capsular, but there was a good slit for all that. Two days after, I tested his sight and found 20/30 vision, and that he could read Jaeger No. 1. The eye looked a little red. The prospect seemed good.

In two days the redness increased and slight hypopyon appeared in the anterior chamber. The tension as taken with tonometer was 20 MM. The circumcorneal injection was not very marked but present. The slits I made in the capsule began to close up with a low grade of inflammatory exudate and they are nearly completely closed. He had some pain at intervals, not much. I was very much surprised to find that that membrane was not capsular but it was exudative and in adhesive contact with the anterior body of the vitreous. The fundus appears normal; the field normal. The vision as demonstrated by the test is 20/20 if we could get an opening through that adventitious membrane.

I have never encountered a membrane like that. Of course, I have seen after-cataract in which the pupil is completely occluded by a dense membrane but this seemed to be different, for the pupil dilates widely with atropine and there seems to be no adhesion between the iris and the membrane."

This condition though occurring very rarely, has been most interesting to me. I have wondered if those cases which most operators have seen in which a needling or discission for secondary cataract has not been successful, might be of a like nature.

All the patients you will observe, had or had had an excess of sugar in urine or blood or both.

Does the presence of *sugar* in the urine or *blood* indicate a possible chemical change in the aqueous humor, which produces a reaction on the cell structure of the hyaloid membrane of the vitreous with which it is in imminent contact? Possibly this reaction produces not a new membrane but rather a thickening and opacification of the vitreous hyaloid. The beginning and growth of the opacification would seem to indicate such a process. Or may it be of like cause with the production of cataract in *some* diabetics, the large percentage of whom do not have cataract?

S. Weir Mitchell seventy years ago, while experimenting on frogs, produced cataracts in from ten to twenty-four hours by injecting excessive amounts of sugar. He made this statement: "It is possible that the long continued presence of even a small amount of sugar in the blood may cause in the crystalline lens osmotic changes, productive of opacity."

Antidiabetic treatment has retarded development, and arrested it, and in a few cases reported, partially cleared the cataractous condition.

Hyperglycemia seems to accompany all the diseases which are sometimes given as probable causes of cataract, such as acute and chronic infections, thyroid disease, high blood pressure, nephritis, diabetes, and arterial sclerosis.

In closing let me say in resume:

First—I do not believe this condition is a sequela of the intracapsular extraction only. It may, and I believe has occurred following other forms of extraction in which contact of the aqueous with the virtreous body is made possible.

Second—All cases observed had or had had an abnormal sugar content, which leads me to believe this may be the causative factor, the remote cause being that of the presence of sugar. I believe that the opacification is the result of some

form of chemical action of the aqueous content upon the structure of the hyaloid.

Third—Because of the unfavorable results obtained, I believe it unwise to interfere surgically with these membranes.

Why such an obstruction should form in a few sugar patients and not in all, and why operative measures always should prove disastrous, would be interesting to know.

983 REIBOLD BLDG.

DISCUSSION

M. PAUL MOTTO, M.D., Cleveland—It is a privilege and honor to be called upon to discuss Dr. Millette's recent contribution to the ophthalmic literature. With his great experience on the subject of cataract, and his marked success in handling these cases, one feels quite reluctant to add to his views.

The problem which Dr. Millette brings up for solution is one, I dare say, that from my review of the literature, has worried many other able ophthalmic surgeons. That the formation of a membrane following cataract operation still concerns us, and is responsible for poor visual results following successful extraction, should call for a thorough scientific study of the problem.

The occurrence of the membrane only three times following thirty-five hundred intracapsular operations is indeed an enviable record, and it is doubtful whether the capsulotomy operation would yield such good results. In view of the fact that Dr. Millette has had only three failures due to membrane formations, I feel that he is conservative in advising against operative interference in these cases. If there is a possibility of even partial restoration of vision by needling, then I see no reason to withhold the operation thus eliminating the patient's last chance. Surely there is nothing to lose in these cases and much, I feel to gain; so then, why not advise the patient as to what to expect. Then, and only then, will we be doing our real duty and rendering a service to the patient.

Dr. Millette has observed that all these cases in which there was a membrane following cataract operation were diabetics. The occurrence of this annoying sequela in cases showing glycosuria or hyperglycemia is an interesting observation, but at the present time our evidence is insufficient to warrant the conclusion that all patients affected with diabetes and having cataract will, following extraction, show a membrane formation.

Burch has observed in a study of two hundred and ten cataract cases that arteriosclerosis with or without hypertension was frequently found associated with failures in cataract operations due to iridocyclitis and chronic uveitis.

In the series of cases reported by the essayist, it will be noted that practically all were arteriosclerotic and were affected with or without hypertension. May this not have a bearing on the formation of these membranes which may be remains of hemorrhages and exudates following operation? Also, we must consider the possibilities of biochemical changes which the aqueous and vitreous may undergo due to an osmotic disturbance in the eye following operation. The exact knowledge of what these changes are is at present not known. Because of the extreme delicacy of the anatomical structure of the eye, no cataract operation, however technically correct it might be performed, will always yield completely satisfactory results.

Research has added much to our knowledge of the subject of cataract; however, much remains to be done to assist us in successfully dealing with this particular problem, and this can be accomplished through intensive and thorough experimental endeavor which should uncover something of importance.

Our results in cataract cases, it would seem to me, would offer greater promise if we were not so conservative as regards the time of operating these cases. Instead of waiting until the physical condition and advanced age make the operation more risky, we would be favoring the patient if we operated earlier; that is, before the lens reached that stage which we designate mature.

Coupled with the earlier operation, our improved operative technique, we should insist on a complete physical examination, elimination of all foci of infection, a determination of the blood sugar, and a biomicroscopic study of the lens.

The Value of Periodic Health Examinations in the Detection of Early Tuberculosis

CLARENCE L. HYDE, M.D., East Akron, Ohio

THE importance of finding tuberculosis early has been recognized for many years.

An immense amount of time and thought has been spent in developing methods to bring these cases to light. The intensive research at the bedside and laboratories; the development of the highly specialized tuberculosis clinic; the employment of field nurses; the programs of education; the emphasis placed upon the examination of contacts, and the more recently developed work among the children, are all expressions of an endeavor to find the early case.

In spite of the fact that these efforts have brought a greater proportion of early cases to light each year, cases with late chronic pulmonary tuberculosis still lead in the demand for admission to our sanatoria.

There are three manifest causes for delay in diagnosis:

1. The failure of the patient to seek medical advice at the right time.

2. Neglect of the use of available diagnostic agencies.

3. Inadequate follow-up of contacts and those with latent lesions.

Much stress has been laid upon the importance of symptoms in the diagnosis of early tuberculosis. Cough, pain, hoarseness, hemoptysis, afternoon elevation of temperature, rapid pulse,

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Superintendent, Springfield Lake Sanatorium.

shortness of breath, fatigue, loss of weight and dyspnoea are recognized symptoms which might be due to pulmonary tuberculosis but they are evidences of well established disease. These individuals should be found before their lesions have become severe enough to cause such symptoms. When pulmonary tuberculosis causes enough discomfort or anxiety for the patient to seek medical advice, destruction of tissues has occurred and the disease has passed the early stage.

The early tuberculosis I refer to, causes few symptoms and unless the onset is accompanied with hemorrhage or the pain of a pleurisy, the physician will not be visited. The onset is so insidious that months often lapse before the disease is detected.

If symptoms are caused, they are usually mild and not disabling. They are either ignored or home remedies or patent medicines are resorted to before seeking aid.

When the patient goes to his physician, the physical signs of tuberculosis may be absent or indefinite, and they simulate so many other conditions, that they are misleading and unless the routine of the physician's examination includes all the diagnostic procedures available for the detection of tuberculosis, many cases will be overlooked.

If the onset is accompanied with severe symptoms and definite physical signs, they might be mistaken for those of other acute respiratory infections such as colds, influenza, pneumonia, asthma, croup, etc.

The history, symptoms, physical signs, tuberculin tests, radiographic and sputum examinations all have their value but they must be accurately performed and correctly interpreted. No one test should be given greater weight than is justified.

There is a tendency among physicians, particularly the specialists, to make positive statements that a patient does not have tuberculosis, often from too superficial an examination. If a lesion is found well defined there should be no hesitancy in informing the patient that he has tuberculosis, but often it will require a long period of observation, utilizing all known diagnostic procedures, to satisfactorily rule out tuberculosis.

The definite minimal and moderate degrees of tuberculosis of the hilum so frequent in children and latent tuberculosis of adolescence and early adult life require regular examinations over an extended time, often several years. This is particularly the case during periods of uncertain balance when minor changes in the patient's life might mean extension of the disease or recovery. To tell a patient that he does not have tuberculosis during such a period is to seal his death warrant for the average individual is only too glad to feel free from the stigma of tuberculosis and to forget his previous suspicions.

"Recognition of the difference between tuberculosis of childhood and adult life is the key to the understanding of the disease," says Opie. "Both from the clinical and pathological viewpoint the spread of the disease from the primary focus of infection in the lungs to the adjacent lymph nodes is the outstanding feature of tuberculosis in infancy and childhood."

If the portal of entry is in the tonsils or nasopharynx, it spreads to the adjacent cervical lymph nodes; if in the lungs, to the tracheobronchial nodes; and if in the intestine, to the mesenteric nodes.

Tuberculosis of the lungs precedes tuberculosis of the hilum and pulmonary tuberculosis is therefore more common in childhood than was formerly reckoned from clinical evidence. After the first year of life the child develops an increasing resistance and most primary infections of the lung become healed.

Tuberculosis of the nodes of the hilum is common in children but it is often difficult to determine their true condition. Nodes which are completely calcified are of no menace, but when small areas of calcification are present with softened nodes they are a potential source of danger. Sometimes they can be recognized but more often no definite determination can be made. There are a large group in which the disease lies dormant until periods of strain and stress lower the resistance, a reactivation takes place and the disease is spread to other areas. This is the latent tuberculosis of the hilum which develops into the true pulmonary tuberculosis of the adult.

If the "spread of the disease from a primary focus of infection to the adjacent lymph nodes is the outstanding feature of tuberculosis of infancy and childhood," the outstanding feature of adult pulmonary tuberculosis is the transition of latent tuberculosis of the hilum to pulmonary tuberculosis of the adult, the one is a lymphatic spread and the other often circulatory.

For the past nine years we have been accumulating evidence in our Akron clinics on this phase of the disease. From thousands of periodic examinations and serial radiograph plates of school children it has been found that as the child with the latent tuberculosis of the hilum approaches puberty there is a greater tendency for the disease to spread to the lungs, the tendency lasting throughout adolescence and early adult life.

Regularly repeated examinations and radiographs of the children who have hilum tuberculosis will reveal the acute exacerbation into massive nodes, small pleural effusions or the diffuse infiltration of the lungs, which could not be detected in any other way because of the absence of physical signs and clinical symptoms. These are the early cases of tuberculosis detected at the time of a reinfection or the acute extension from the hilum and it is at this time that institu-

tion of appropriate treatment will heal the lesions most quickly, most permanently and insure the greatest restoration of function.

In order to discover the great mass of latent and early cases at the time of acute exacerbation we cannot wait for the patients to go to their physician; they must be sought energetically not only among those who are sick and underweight, but among the apparently healthy as well. The search is a community problem and definitely concerns public health. Until the community recognizes its responsibility, we may expect the regular appearance of late chronic tuberculosis with all of its disabling characteristics.

Because the first evidence of the disease appears in childhood and the laws of our state compel the child to go to school, it is our duty as well as an excellent opportunity to concern ourselves regarding their health. A complete annual examination, including radiographs of the chest, of all children through the grade and high school life would answer the purpose.

Drs. W. L. Rathbun of Chautauqua County, N. Y., and H. D. Chadwick of Boston, Mass., examined many thousands of school children and found as much tuberculosis in the apparently healthy as in the sub-standard. Three per cent of school children in both communities showed definite evidence of tuberculosis.

It is the practice of the Akron and Summit county public schools to refer all known contacts and suspects to the tuberculosis clinics after an attempt is made to correct malnutrition and physical defects.

The clinics are conducted conjointly by the departments of health of the city and county and the Springfield Lake Sanatorium. The health departments furnish the materials, nursing and field service and the sanatorium furnishes the medical examiners, special laboratory and radiographic work.

The sanatorium physicians visit the homes as consultants when necessary and patients are brought to the sanatorium for unusual diagnostic tests or treatment.

If tuberculosis of the hilum appears inactive, the patients are kept in their regular classes in school, an effort is made to adjust the home life and give such additional rest and changes in the diet as are indicated.

In the cases where cooperation in the home is out of the question or where there is a suspicion of latent activity, the children are placed in the open window rooms. Here the child is under better control and observation. Three hundred and sixty children can be taken care of in the open window rooms of six schools in Akron.

The children are given a morning and afternoon lunch, a well balanced noonday meal and periods of rest. The school nurse studies the home conditions and trys to obtain cooperation from the parents in guiidng the child after the school hours.

The routine of the open-window rooms is similar to that practiced in the preventoria and open-air schools elsewhere.

If definite activity is found, the child is either placed at bed-rest in his home or sent to Sunshine Cottage, the children's building at the sanatorium.

Regularly repeated examinations are made and periodic radiographic plates are taken of all suspects and diagnosed cases as often as required—every three, six, or twelve months until maturity.

Once a week throughout the school year the open-window room physician, who is employed by the Health Department, and the school nurse, brings new or old suspects with charts of the histories and previous examinations to the tuberculosis clinic. A conference is held to determine their status and the treatment needed.

Last year 604 children were treated in the open-window rooms at a cost of $29.31 per child per year, above the usual educational cost. Many latent or mildly active cases of hilum tuberculosis are healed here while carrying on their school work at a very low cost to the community.

"The purpose of periodic health examination is not the diagnosis of so-called disease but the detection of physical impairment or predisposition to disease and the faults of living habits, the correction of which would have even a remote beneficial influence on the life of an individual," says Dr. Eugene Lyman Fisk.

While our purpose is to determine the presence of disease and does not meet Dr. Fisk's description of periodic health examination in a strict sense, nevertheless regular periodic examinations throughout childhood, adolescence and early adult life give the best promise of lowering the high percentage of chronic advanced pulmonary tuberculosis which now present themselves for treatment.

County authorities have the power to recommend to county budget commissions the inclusion of a definite sum of money for the payment of hospital bills for the county's indigent crippled children, Attorney General Bettman ruled in an opinion recently handed down to Don W. Myers, prosecuting attorney of Lorain County. Bettman held that the terms of the act allowing a county to "pay board, personal necessities" and "medical and surgical treatment" of indigent crippled children was sufficiently broad to include hospital care.

Annual Congress on Medical Education, Licensure and Hospitals will be held at the Palmer House, Chicago, February 17, 18 and 19.

Drug Addictions*

C. C. KIRK, M.D., Orient, Ohio

IN studying the personality of those who are addicted to the use of narcotics one finds only a small percentage, probably ten or fifteen per cent, who may be regarded as normal individuals, that is to say, one whose mental make-up is so well organized that he is continuously able to stand up under the stresses and strains of this highly competitive and exacting economic and social life. The vast majority of drug addicts have shown some form of nervous instability before they become addicted.

In going thoroughly into the history of drug addicts it will usually be found that they may be classed as abnormal to the extent of being called nervous, neurotic, psychopathic or erratic individuals. Many of them are regarded as having charming personalities and a very distinct and unusual individuality. They may be regarded as care-free individuals, seeking new excitements or sensations, sometimes expressing itself in anti-social acts. Occasionally we find the drug addict can be classified as a definite case of hysteria, psychathenia or the milder case of manic depressive psychosis. However, it is extremely rare that a drug addict may be regarded as definitely insane, using the term insane as a medico-legal term.

Thus we may say that these nervously unstable individuals secure relief from their psychic conflicts, even though it may be temporary, by the use of the various narcotics.

Prior to 1915, when the Harrison narcotic law went into effect, nearly every general practitioner with a large practice had one or more addicts under his care, some of whom were directly due to his carelessness in the administration of the drug for the relief of pain or for the relief of long continued illness.

After morphine is administered the normal individual experiences a feeling of drowsiness and relief from any actual pain that has existed. But he is not likely to have the feeling of pleasure which comes to the neurotic, psychopathic, or one with an abnormal make-up. This frequently can be attributed to the fact that these individuals experience a relief from their psychic conflicts. It is not unusual to get a history from the addict that his first experience with the drug produced more pleasure than any subsequent indulgence, so that the dose is increased for the purpose of getting that first thrill, which never comes again. And the efforts to revive this first sensation are a factor in causing the addict to increase the dosage, so that as much as sixty or seventy grains a day are being used.

The psychopathic type receives from the use of the drug mental peace and calm to which he is not accustomed and it takes him out of this world of painful reality and places him in a world of fantasy, where he experiences a sense of ease and pleasant relaxation, free from unusual anxiety and depression, and he thinks the world is a beautiful place in which to live and inconveniences do not produce any discontent in his mind. But, alas! After the first stages of the drug addiction have passed there is a struggling for relief from withdrawal symptoms, and as Kolb says, "thus it happens that the drug, taken in the begining because of its power to raise an inferior individual above his normal level, must be taken in the end to keep him from sinking below it and to relieve conditions that the drug itself has produced." So they pass through periods of comfort and discomfort, depending upon their ability to secure a sufficient amount of the drug to satisfy the demand, and then come to the worry and fear that the next dose may not be forthcoming. So they may be looked upon as restless, unhappy and discontented and they finally pass to a stage where pleasure is completely overshadowed by pain.

And it is at this stage that they usually seek a cure. After the so-called cure their general health improves and they take on weight, but usually within a short time the old impulse manifests itself so strongly that they succumb to this irresistible desire and then we have the vicious circle again. Incredible as it may seem, many of our most brililant and unusual men and women have gone through this terrible ordeal. 'The confessions of De Quincy are splendid examples of eloquent English. Poe, Swinburne, Coleridge and other outstanding literary men and women were users of both morphine and alcohol, and much of their best work was done while under the influence of either opium or alcohol. These poisons seemed to have an influence on these great men similar to the poison of tuberculosis which affected Robt. Louis Stevenson, Keats and Shelley."

If the confirmed drug addict is asked the question, "why do you take morphine?" his answer will usually be, "not for the pleasure it gives me, but for the relief of pain". Of course, this does not apply to the psychopathic type who deliberately addicts himself because of the pleasure that he receives from the use of the drug.

The question of deterioration is one upon which there is a difference of opinion. I have seen men and women addicted to the use of morphine over a period of twenty or thirty years who did not appear to suffer any mental or moral deterioration. But this is extremely rare. There are certain types in which lethargy and idleness are the outstanding characteristics, but in other types the

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use of morphine seems to have a stabilizing influence, thus doing away with the committing of crimes and suppressing certain anti-social impulses. Many crimes have been committed by these psychopathic individuals during the time when they were out from under the influence of the drug. When we find marked deterioration we usually look for a history of cocaine addiction in addition to morphine addiction.

Kolb, in summarizing his paper on Pleasure from Narcotic Addiction says: "Opiates apparently do not produce mental pleasure in stable persons except a slight pleasure brought about in some cases by the relief from acute pain. In most unstable persons opiates produce mild pleasure during the earlier period of addiction. The degree of pleasure seems to depend upon the degree of instability. The larger number of addicts experience a pleasurable physical thrill following injection of morphine or heroin. Normal addicts experience this thrill in only a very slight degree, if at all. Cocaine may produce pleasurable stimulation in both the normal and abnormal but the pleasurable stimulation is slight in nervously normal individuals. Nervously normal opiate addicts apparently do not undergo an appreciable mental or moral deterioration, but this class of addicts constitutes only a small proportion of the total number in the United States. Much of the moral deterioration attributed to narcotics in the past was not deterioration but an original nervous instability and moral obliquity. Mildly psychopathic individuals deteriorate more because of their addiction than any other class of addicts. No preparation of opiates produces an appreciable intellectual deterioration."

The question of crimes committed while under the influence of morphine or heroin is a debatable one. Newspaper and magazine reports indicating that drug addiction is the cause of crime, is yet to be proved in my mind and in the minds of many reliable writers on this subject. In the first place, those under the influence of morphine or heroin are serene, calm and lethargic. Then, these individuals receive relief from their physical and mental vexations, so that they have no desire to commit crime. They are usually neither ambitious nor aggressive. Of course this condition is only temporary and usually lasts while the drug is having an effect. The drug may change the irritable, restless, discontented individual into an agreeable non-aggressive and pleasant one. The drug seems to temporarily inflate the individual to such an extent that he loses his desire to commit criminal acts and it is thought by some that he even loses his courage because everything is satisfactory to him. Occasionally the individual may be led into crime because of the so-called fatalistic or "don't care" state into which he develops.

The extreme psychopath might, through suggestion, be led into committing murder during the time he is under the influence of the drug, but this would be rather unusual as the history of most of the addicts is that they are rather easily influenced for good as well as for bad and they sometimes give a history of having been disagreeable, fighting, anti-social individuals with bad tempers, but for some reason they lose their courage and their fighting qualities after they become addicted. So, we may say that the individual who is a user of morphine, who is psychopathic and criminalistic in his tendencies, is less so after he becomes a user of the drug. Cocaine seems to increase courage and efficiency unless he takes too much, he then develops abnormal fears.

It has been estimated that there are between 250,000 and 300,000 addicts in the United States and that heroin is the preferred drug along the Atlantic coast but that morphine is the most popular drug among addicts of the west and south. There are apparently fewer addicts now than there were ten years ago. While some of the prison population show an increase in the number of addicts, this is probably due to the more critical examination of all prison patients than was made ten years ago. Furthermore, thousands of addicts who were not molested before the Harrison law went into effect are now being convicted and last year there were more than two thousand persons in the federal penitentiaries sentenced for violation of the Harrison law. Habitual criminals are psychopathic and they are abnormal individuals, and because of this they may become drug addicts, but this is only a part of their delinquent career and the crime they commit is not necessarily due to the drug.

The treatment of the morphine addict depends somewhat upon the physical and mental condition of the patient. All persons who desire treatment for drug addiction should be placed in an institution under the care of nurses and doctors accustomed to treating that type of patient. As a rule a patient can be taken off the drug with considerable safety within two weeks after he enters a hospital. I usually allow one-half of his accustomed amount of drug the first day. The second day I reduce this one-half and the third day the same, and so on until the complete reduction is made. During this time I keep up very severe elimination by the use of compound cathartic pills and through hydrotherapy. The patient should have large quantities of water and plenty of milk, eggs and sugar.

The question of psychotherapy and psychoanalysis and the building up of the physical system is too long a story to discuss in a short paper.

REFERENCES

"Pleasure and Deterioration from Narcotic Addiction," by Lawrence Kolb, M.D., and Jeanette Mark's book on "Genius and Disaster".

DISCUSSION

C. H. CREED, M.D., Columbus—I have enjoyed this paper of Dr. Kirk's very much and with few

exceptions, heartily concur with him in his statements.

He states that probably not more than 10 per cent or 15 per cent of addicts may be regarded as normal individuals originally. Basing my opinion solely upon my personal experience with these unfortunates, over a period of more than fifteen years of State Hospital work, I am inclined to believe this percentage is a little high, in fact the more of them with whom I come in contact, the more I wonder if all addicts are not of psychopathic personality, or at least neurotic, and if a really normal individual ever becomes addicted. Understand, however, that my experience has been with addicts who have come to the State Hospital, the majority of whom are veterans, and possibly my clientele has not been quite so elite as has been that of Dr. Kirk's, and the authorities whom he has consulted.

Regarding the question of deterioration, the number in my experience who did not show moral deterioration has been extremely small, if not zero. However, as Dr. Kirk has said, this may be more an apparent than real deterioration, and be simply the individual's normal moral obliquity.

As to whether drug addiction is increasing or decreasing, I do not have any convincing data at hand, but will relate what the records at the Columbus Hospital show.

Over the ten year period ending December 31, 1928, we received one hundred twenty-seven cases, eighty-three male and forty-four female, an average of 12.7 admissions per year. In the first five years there was a total of sixty admissions or an average of 12 per year; during the second five years there were 67, or an average of 13.4 admissions per year; an increase of 1.4 average yearly admissions over the first five year period.

Of these one hundred twenty-seven cases, seventy-seven were voluntary commitments and fifty were probated by the Courts. Eighty-four were diagnosed as without psychosis and forty-three as with; one hundred twelve used opium or a derivitive, thirteen used luminol, barbital, bromides or drugs of like nature, one used chloral and one chloroform.

Concerning treatment I am sure we all agree that institutional care is imperative. The one case I foolishly attempted to treat outside of an institution was a complete failure. I was following the treatment outlined in a text book, was making rather rapid reduction without apparent discomfort to my patient, and really felt quite pleased myself, until I discovered he was being simultaneously treated by no less than six other physicians. This was many years ago when I was young.

The general management of the cases treated at the Columbus State Hospital is essentially the same as that stated by Dr. Kirk. In addition we usually give the patient something at regular, frequent intervals; some mixture such as that recommended in the Towns-Lambert treatment, the chief value of which no doubt lies in its psychic effect. By far the most important step in the treatment is the drastic elimination.

When it comes to the reduction or withdrawal of the drug, I differ a little from Dr. Kirk. Most of our patients are old timers at the business and are more or less familiar with the method of having their initial dose, after entering the hospital, equal to one-half of their customary dose, and as the patient is usually our only source of information, he will be careful to make his report as to his customary daily consumption sufficiently large to insure him several more days of comfort. Consequently I feel that the patient's condition is our best guide as to how to reduce. In those who have organic troubles the withdrawal is graduated according to his condition, and in some cases is extremely gradual. In those in which we find no organic trouble we start them out on the "cold turkey method", immediate withdrawal. Then if their withdrawal symptoms become too severe or if for any other reason it is deemed adsisable to give him the drug, it is given in very small amounts. The big majority of our cases receive no more than a few very small doses, if any. As a rule they are uncomfortable for a few days, and I do not think they should expect to be gotten free from the drug without some discomfort. If we have our tonsils or appendix removed, we expect to be uncomfortable for a while. During these first few days, we are quite frequently cursed and threatened, but after a few days have elapsed these self-same patients shake our hands and thank us for not having given in to their pleas for the drug.

I realize that this method of withdrawal would no doubt be impractical in a private hospital because of its unpopularity.

Detection of Chronic Carriers of the Typhoid Bacillus

G. W. MOOREHOUSE, M.D., Cleveland, Ohio

FOR some years in Cleveland we have used the Widal reaction in our search for chronic carriers of the typhoid bacillus, believing that in any group of suspected individuals one showing a positive Widal should have primary consideration as the probable carrier. As a corollary to the above we believe that a food handler with a positive Widal not fully explainable on other grounds should be excluded from such occupation until the carrier state can be excluded.

It has been said that chronic carriers are the chief source of typhoid infection in a municipality whose water and milk supplies are adequately safeguarded. Cleveland has been in this class for ten years. In view of this statement it is interesting to note that epidemiological histories taken by Division of Health nurses during this period have failed in the majority of instances to suggest any individual as a chronic carrier or group of individuals as harboring a chronic carrier responsible for the infection. There were, however, four groups of cases in which this did occur. Two of these groups used "loose" milk which might have been contaminated at the dipping station where it was purchased *. The third group of cases were guests at a luncheon served by a caterer and his assistants. The possible carriers indicated by the epidemiological

From the Bureau of Communicable Disease, Division of Health.

*Dipping stations were little shops in which only milk and milk products were handled. These were permitted to dip milk from large cans to containers brought by the customer. They were soon after abolished.

histories of these cases numbered about twenty. If there was in each of these groups a chronic carrier of the typhoid bacillus his exclusion from food-handling was very important. No one of them admitted having had typhoid fever, yet, in each group was found an individual with a positive Widal and in each of these the typhoid organism was isolated from the first specimen of stool submitted.

In the fourth group of cases the epidemiological history pointed to one individual as the carrier. Her Widal was positive and the carrier state was promptly confirmed.

Our experience in releasing typhoid convalescents by stool culture had not warranted us in anticipating the results we have so far secured in the discovery of chronic carriers. To date between eight and nine hundred typhoid convalescents have been released from supervision on the receipt from the city laboratory of two negative stool cultures; but in only one instance has the laboratory reported a positive culture in a typhoid convalescent‡. Stool specimens from typhoid convalescents are collected in the home or in the hospital in which they have been under treatment without previous administration of a laxative or cathartic. Probable chronic carriers are sent to Cleveland City Hospital where a specimen, presumably duodenal contents, is secured after an effective dose of elaterin. Incubation is begun at once.

The Widal reaction is found positive in persons who have typhoid fever; in those who have recently had this disease or have been given anti-typhoid inoculations. It is also commonly present in chronic carriers. There is good evidence that the blood of a chronic carrier usually gives a positive Widal. While this is stated by some as invariable, others report the detection of chronic carriers whose blood does not give the agglutination test, still others report failure to confirm the carrier state in certain individuals whose blood gave a positive Widal not explainable by recent typhoid fever or recent anti-typhoid inoculation. Therefore, in any group of possible carriers the individual who gives the Widal reaction should have primary consideration. Whether those with negative reactions may be dismissed as non-carriers is one upon which we do not desire to express any further opinion than that it would be usually but not invariably safe.

No claim is being made that our further experience along this line will be one hundred per cent successful; the procedure has worked well in practice and will be given further trial as opportunity offers.

‡ This paper is not written from the standpoint of the laboratory. Its technic, however, is as follows: One loopful of stool having been incubated in ten cubic centimeters of Krumweide's brilliant green medium, the contents of the bottle is homogenized and one loopful plated on each of two petri dishes of eosin-methylene-blue agar. These are incubated for 18 to 24 hours and examined for suspicious colonies. If any are found they are fished and placed in Russell's triple sugar medium; if characteristic reactions are given, their motility and reaction to Gram's stain is determined. The organisms are finally tested for agglutination with specific serum. If this is at first negative, the organisms are transferred daily for five or six times to plain agar. They are not reported positive unless a positive agglutination is secured.

How People Sleep

Reasons for sleeplessness, ways to sleep to obtain the greatest benefit, and many other interesting experiments in that field were discussed at a recent international conference of psychologists at New Haven, Connecticut.

H. M. Johnson of the Mellon Institute, Pittsburgh, stated that experiments conducted there showed that the greatest possible relaxation during sleep is in a coil much like a kitten's and in a sprawling posture resembling that of a swimmer. He said that a bed that is too narrow or badly designed simply limits the number of postures that are favorable. Mr. Johnson declared that a typical sleeper on a typical night lies in nine different postures in eight and one-third hours; shifts from one to another 33 times and remains quiet for period of two to 56 minutes, the average being 15 minutes. Postures held too long a time result in bowing backward of the spinal column, he said.

Experiments conducted by Dr. Coleman R. Griffith, University of Illinois, among prominent athletes and other groups at that school showed that the athletes are one-third more restless than an unselected college group, but that the athletes are about one-third quieter than young children. Wives of middle-aged men were found by the Mellon Institute investigators to be about as restless as athletes. They also found that middle-aged men engaged in professional work were a little more restless than athletes, but not as much as young children. The athletes were found more restless than usual after a hard contest and that sometimes they slept less after a particularly exhausting one. It was pointed out that the nervous type of sleep, known as "sleeping like a log" is very unusual among healthy sleepers.

Other investigators pointed out that young children wait about three times as long as adults before going to sleep and that most authorities prescribe more hours of sleep than the average child will actually take. One special study made with 1000 young children by Dr. Josephine C. Foster, Minneapolis, showed that the average sleep varied from 15 hours out of 24 hours for six-months-old children to 11 hours for seven-year-olds.

It was stated that city children sleep longer than country children and that children of better educated mothers take more naps during the day than any other children.

Children from three to five years were found surprisingly active at night by C. R. Garvey, University of Minneapolis. The most quiet child of this age group lies still about 10 minutes at a time on the average; the most restless five minutes.

The President's Page

A Personal Communication to the Membership from

ALBERT H. FREIBERG, M.D., Cincinnati

MENTAL HYGIENE.

Leaving out of account the superstitious and even absurd ideas regarding mental derangement which have come to us from older generations, the uninformed, even in the medical profession, are likely to think of mental ills as unavoidable; they have become associated in our minds with civilization and are looked upon as a necessary price which we have to pay, even though a terrible one. When we think of mental ills we think of the "asylum" and its unfortunate inhabitants, the most of whom are destined to remain where they are for the rest of their days. Indeed, although the word originally implied a place of security for those who sought it out, we are apt to look upon the asylum as existing rather for the security of the rest of the world than for those who occupy it. We speak of the occupants of the "asylum" as "unhappy" when as a matter of fact the reverse is often unbelievably the case. Unhappiness is perhaps more often the lot of the family of the mentally ill then it is of themselves. All too often it is the burden of both groups.

The magnitude of the problem which is imposed upon society by mental illness is admittedly great. However, but few of us realize how great it really is as we utter such words. A few statements taken from the publication of the American Foundation for Mental Hygiene will serve to establish this in our minds.

"The 1928 hospital census of the American Medical Association showed that one out of every 325 persons in the United States was a patient in an institution for nervous or mental disorders (including the feebleminded and epileptic), while only one out of every 2,406 persons was a patient in a tuberculosis hospital.

"There are now 300,000 patients in hospitals for mental diseases in this country, and this population is increasing at the rate of approximately 10,000 annually.

"There are more patients in mental hospitals than there are at any one time patients in all of the general hospitals of the country, and most mental hospitals are at all times so overcrowded that many new cases are denied admission and their rightful chance of recovery.

"The approximate cost of maintenance of the 300,000 mentally ill persons in institutions is $80,000,000 a year.

"The economic significance of the problem of mental diseases in the United States is indicated by the fact that the economic loss to the State of New York alone for the year 1928 was estimated at $143,000,000.

"There are approximately 500,000 feebleminded in the country today, of whom only about 50,000 are in institutions. In addition, surveys made by the National Committee for Mental Hygiene have shown that at least 400,000 children in the public schools are so handicapped mentally that they cannot profitably follow the ordinary courses of study. Special-class provisions have been made for only about 10 per cent of this number, the rest growing up in danger of becoming dependents, ne'er-do-wells, delinquents and criminals.

"Added to these problems are two others of first magnitude: Suicide and Crime."

Sufficient has been said concerning the magnitude of the problems presented by the various aspects of mental disease, to make it apparent that they should constitute a major activity of those who look forward in the hope of preventing human misery to the utmost, rather than contenting themselves with its alleviation. To most persons, including the majority of our profession I believe, mental disease is of such intangible character, that we are quite uncomprehending of the significance of a program for mental hygiene. With the acknowledgement of the fact that a very large part of all mental disease has its roots in hereditary forces which we are thus far not able to control; that another large proportion of cases must be attributed to syphilis, alcohol and narcotic addiction and that these are factors which we are fighting with rather meagre success, one might indeed wonder how a mental hygiene might be spoken of. Nevertheless, the situation is not without a parallel within the memory of many of us. Less than two generations ago the likelihood of controlling the incidence of tuberculosis was by no means as bright as one might with justice consider the conditions with regard to mental disease today. Lest this should be regarded as an exaggeration, attention is directed to the fact that we may today have at our disposal organized forces, both within the medical profession and of the public at large, the like of which did not formerly exist. Through the cooperation of these forces the remarkable achievements of modern sanitation have been brought about. It may be safely asserted that without such collaboration, the results which have been atttained would have been impossible of accomplishment. It may be said that in the case of tuberculosis we have learned what is the specific cause of the disease, together with the precise conditions under which this operates and perpetuates itself; whereas this is not at all the case, in any like manner, with regard to mental disease. The reply may be made that much men-

tal disease has as its cause specific organisms which may be much more directly influenced than the bacillus of tuberculosis; and, on the other hand that progress in tuberculosis control has depended much less upon any direct attack upon the specific virus than upon the knowledge which was acquired of the conditions under which it produced disease and the manner in which the infected human organism reacted to the various influences which the new knowledge made it possible to apply. It may even be questioned whether it would be possible to show, at the present time, that the number of persons who become infected with tuberculosis is very much smaller than was formerly the case. It is easily shown, however, that the mortality from this cause has been notably reduced and that a very large number of those infected persons who were formerly destined to succumb after a long period of disability, may now be restored to health and useful activity by methods which are entirely practical.

To discuss the resources which are to be sought, by means of which a program for mental hygiene upon a broadly conceived plan is to be put into effect, is entirely beyond my purpose. It would, indeed, be most unbecoming of one whose professional activities have been so far removed from this particular territory. On the contrary, it is the object of these words to direct the attention of my colleagues to the activities of those of our number to whom matters concerned with mental disease and its control are of especial professional concern. Their experience with the psychically abnormal not only impresses them tremendously with the magnitude and importance of the tasks which are imposed upon society, but there are those among them with sufficient vision and optimism to realize the possibilities for betterment of the situation. Even though not technically so, their efforts are approved by the Ohio State Medical Association in spirit and principle, because they conform to our ideas of proper organization and control as well as in the beneficence of their purposes. Given the necessary cooperation from the medical profession and, hopefully in consequence, from the public, the outlook is very promising. Society requires all that they propose to do and we can help them to secure the cooperation of the public.

Even a cursory view of the projected activities of both the national and the state organizations for Mental Hygiene will make it apparent that an attack of quite unprecedented character is to be made upon the enormously important problems which are involved. It would be exceedingly hard to essay a prediction concerning the results which are to be expected and no little time must be given before they will be felt. However, it seems perfectly fair to say that the technique which is to be adopted is receiving the careful study of those most nearly interested and also best qualified to make it, both within and without the medical profession. The motives actuating the mental hygiene movement are of the highest, most altruistic character and beyond all question. If these characters were not to be ascribed to a similar movement which was launched with poor success in this state some time ago, this is but an additional reason why the present effort should receive the enthusiastic support of the profession at large. While but a small part of the profession make the study of abnormal mental behavior their chief activity, the related implications of this subject are matters which concern every man in his work, at one time or another. If not for this reason, then merely in our capacity as humanitarians and good citizens we should be alive to the importance of what the mental hygiene movement is striving to accomplish, with the resolve to stand back of it and to cooperate with it to our utmost.

In speaking of war, President Millikan of the American Association for the Advancement of Science is quoted as having said:

"It will disappear like the dinosaur when, and only when, the conditions which have given it survival value have disappeared, and those conditions are disappearing now, primarily because of changes in the world situation being brought about by the growth of modern science."

Is it too much to hope that before long these words may be made to apply with equal fitness to much, at any rate, of the mental disease which is found in the world today?

Seventy-five per cent of the so-called criminal element are defective mentally or have some physical abnormality that operates on their mind, Harry F. Payer, chairman of the Cleveland Bar Association's committee on psychiatry, told the Cuyahoga County Commissioners recently, in arguing for funds for a psychiatric clinic in the Cuyahoga Common Pleas Court. "If the court were to have the report of the psychiatrist on the mental condition of first offenders and they could be dealt with on the basis of that report, the flow of 'repeaters' would be stopped and the cost of administration of justice would be lowered," Mr. Payer declared.

The mortality rate among industrial employes was higher from sickness during the first three months of 1929 than in the same period of any year since 1920, according to records of groups of industrial employes recently tabulated by the U. S. Public Health Service. The report represents the first attempt to provide fairly current information on industrial morbidity. An increase of 38 per cent compared with the first quarter in 1928 is shown in the incidence rate of disabilities lasting more than one week.

Regulations and Procedure Governing Your Federal Income Tax Return To Be Made Before March 15.

Income tax blanks for the 1929 returns have been mailed to all taxpayers of record by all Collectors of Internal Revenue.

Reductions of normal individual and corporation income tax rates for the calendar year 1929, authorized in a joint resolution adopted by Congress and approved by the President on December 16, 1929, will affect income tax returns made on income for 1929.

The Congressional Resolution was retroactive to January 1, 1929, and effective for only the year 1929.

Briefly stated, the resolution reduced all normal income tax rates upon individual incomes by 1 per cent, and also reduced by 1 per cent the income tax upon the net income of corporations. It made no other changes in the Revenue Act of 1928, and it should be borne in mind that it is effective for only the year 1929.

The tax reduction came after the United States Treasury Department had printed all of the 1929 income tax return blanks. For that reason the income tax blanks which were mailed to all taxpayers of record on January 11, 1930, incorrectly state that in the case of individuals the first $4000 of income subject to normal tax shall be taxable at 1½%; the next $4000 at 3%, and the remainder at 5%; whereas the resolution of Congress *has reduced the rates so that the first $4000 of income subject to normal tax will be taxed at one-half of 1%, the next $4000 at 2%, and the remainder at 4%.*

In mailing tax return blanks, the Collectors of Internal Revenue have inserted printed slips in the envelopes directing attention to the new rates. The instructions on the inserted slips should be followed in making out the return.

Corporation income tax return blanks also carry the incorrect information that the corporation tax rate is 12%, whereas by authority of the Congressional Resolution, the rate is reduced to 11%.

The Congressional Resolution which reduced the normal tax rates made no change in the surtax rates.

Special attention of physicians is directed to the provision that traveling expenses incurred in attending medical conventions of organizations of which they are members are allowable deductions from gross income in determining net income derived from practice. Such expenses have been held by the United States Board of Tax Appeals as necessary business expenses and the decision of the Board has been acquiesced in by the U. S. Commissioner of Internal Revenue. (Ohio State Medical Journal, issues of December, 1928; February, 1929; August, 1929, and September, 1929.

THOSE WHO MUST FILE RETURN

Every physician whose net income for 1929 was $1500 or more, if single, and $3500 or more, if married, must file an income tax return with the Collector of Internal Revenue *on or before March 15th, 1930.* He must also file if his gross income was $5,000 or over, irrespective of marital status. All physicians and other professional men are required to use Form 1040 in submitting their return, regardless of the amount of net income.

Collectors of Internal Revenue of the respective districts have mailed blank forms to physicians, whose names are on record. Failure to receive a blank does not relieve a physician of the responsibility to file. If blanks are not received, application should be made at the internal revenue office of the district in which the physician resides. These districts, with the name and address of Collectors, are appended to this article.

Data for income tax returns, internal revenue officials point out, should be arranged on separate sheets under the following classifications: Gross Income, Exemptions, Net Income, and Tax Computations.

GROSS INCOME

Gross income includes gains made from professional services, business activities, certain forms of dividends, bad debts charged off in previous years but since collected, bonuses received as compensation, interest, partnership profits, profits from sale or exchange of real estate, rents and royalties, and funds received from other sources.

PERSONAL EXEMPTIONS

If married and living with wife, or head of a family for the entire year, an exemption of $3500 is allowed; if single and not a head of family, an exemption of $1500 is permitted. In case of change of marital or head of family status during calendar year, the personal exemption is prorated over the period of married, head of family, or single state. Credit of $400 is permitted for each dependent under 18 years of age, or each physically or mentally handicapped dependent, regardless of age. The credit is not allowed in the case of a dependent minor over 18 years of age even if such minor is attending school.

DEDUCTIBLE ITEMS

Office Rentals

If a physician pays rent to another person for office space, he may deduct the amount; if he owns his own home and maintains an office in it, he cannot claim deduction for office rent.

Automobile

The cost of repair and upkeep of an automobile used in professional visits may be deducted. That part of a salary paid to a chauffeur and attributable to time spent in driving his employer

on professional calls, may be deducted. Sums spent for taxi hire, car fare, etc., while on professional calls, may be deducted. The cost of an automobile used in professional calls, may be depreciated. Take the cost price and divide by the number of years of its usefulness and deduct this amount annually in income tax return.

Assistants

Deductions are permitted for the salaries of nurses, laboratory workers, technicians, assistants, stenographers or other clerical workers in offices so long as their duties are connected with professional work. Wages paid maids for services rendered in connection with practice are deductible.

Medicines, Instruments, Supplies

Medicines used in the office to treat patients, medicine dispensed, bandages, laboratory materials and all other supplies necessary to operate the office may be deducted. Upon surgical instruments, one-fifth of purchase price may be deducted annually for five years under depreciation account. All office fixtures, appliances, etc., used in office or laboratory may be depreciated annually, according to the estimated life of their usefulness.

General Office Expense

Cost of telephone, telegrams, etc., used in professional services may be deducted. Expenditures for heat, light, water, etc., are deductible. Office fixtures and furnishings may be depreciated 10 per cent annually. Original cost of medical books may be depreciated 10 per cent annually, since the life of these is usually considered 10 years.

Professional Dues

Dues paid to professional associations to which, in the interest of his profession, the physician belongs are exempt and may be deducted. As stated previously, traveling expense incurred in attending medical conventions has been held to be deductible. Expenses incurred in taking graduate courses have been held *not* to be deductible.

When to Deduct Debts

If the physician's books are kept according to the "Cash Receipts and Disbursement" system, he may not charge off any unpaid debt because he is then only reporting as gross income those accounts which have proved to be good. Bad accounts have not been reported and are therefore, not deductible.

If books are kept on an "Accrual Basis" (where expense is actually incurred and payable even though not yet paid, or income earned although not yet collected) it is permissible to charge off all debts which have been definitely ascertained to be worthless during the fiscal year covered by the report.

In the same way, the physician is permitted to claim deduction for all other expenses within the scope of his profession, and the amount of his tax is determined on the net income which remains after these items have been deducted.

Taxes and Licenses

Any tax paid upon materials required in professional work are exempt. All license fees which physicians are required to pay are deductible items. This includes the narcotic tax, automobile license, local occupational taxes, taxes on club dues, etc. The Ohio Gasoline Tax is not deductible.

Other Allowable Deductions

All taxes paid upon real or personal property, whether the property is used for business or otherwise and all interest paid upon indebtedness (except interest paid to carry nontaxable securities) are deductible. It is permissible to deduct from gross income contributions when made to charitable, religious, educational and scientific organizations, to an amount not to exceed 15 per cent of the net income, exclusive of such contributions.

ITEMS NOT REPORTABLE AS INCOME

Allowances received under the War Risk Insurance act; bequests; damages received in personal action; dividends on stock of federal reserve banks, land banks and intermediate credit banks; dividends from exempted building and loan associations up to $300; dividends from corporate earnings accumulated prior to March 1, 1913; gifts, inheritances, insurance proceeds; state court jury fees, state court receivership fees, life insurance proceeds; and stock dividends and rights, are not reportable as income.

All interest received from obligations of a state or political subdivision thereof; from securities issued under the Farm Loan act; interest on Liberty 3½% Bonds and U. S. Bonds issued prior to September 1, 1917, and interest on the obligations of the possessions of the U. S. need not be included in the computation of gross income.

Interest received on Liberty 4% and 4½% Bonds and certain other U. S. obligations is exempt if the total holdings are not in excess of $5000. All interest received on U. S. Treasury notes must be reported. However, all interest received from these sources which is reportable as income, is subject only to surtax.

NORMAL TAX

As explained previously in this summary, the normal tax rate on 1929 income is one-half of 1% for the first $4000 in excess of exemptions and credits; 2% on the next $4000 in excess of exemptions and credits; and 4% on the balance over and above the first 8000 in excess of exemptions and credits.

SURTAX RATES

In addition to the normal tax provided above, a surtax is levied on net incomes of $10,000 and over. The percentages in these follows: $10,000 to $14,000, 1 per cent; $14,000 to $16,000, 2%; $16,000 to $18,000, 3%; $18,000 to $20,000, 4%; and an additional 1% for each $2000 added up to $24,000. After $24,000 each $4000 increase is subject to an additional 1% surtax until $64,000

is reached when there is another change in brackets.

EARNED INCOME

Earned income is taxed at a lower rate than income from sources other than "earned". Earned income may consist of salaries, wages, commissions, professional fees and other amounts received for personal services actually rendered, or an amount not in excess of 20% of the net profits derived from a trade or business in which both personal services and capital are material income producing factors.

If the business requires only a nominal capital and the income is derived principally from personal services of the taxpayer, as a doctor or lawyer, the entire profits, not exceeding $30,000 may be considered as earned income. The first $5000 of net income constitutes earned income no matter from what source derived. In order that the earned income may be taxed at a lower rate, such income is included with income from other sources and the tax figured thereon. The tax is then figured on the earned net income alone, and 25% of that tax is used as a credit against the tax on the entire net income. This credit is termed an "earned income credit" and in no case may exceed 25% of the normal tax on income from all sources plus 25% of the surtax on the earned net income.

HOW COMPUTATIONS MADE

An example of how computations are made is given here for the information of physicians. Suppose a physician was married during the year 1929, has no dependents, and rents his home and his office. He compiles the following data:

Gross income from professional service	$18,000.00
Depreciation of office fixtures, etc.	500.00
Office help, etc.	2,000.00
Telephone, Heat, etc.	500.00
Occupational tax, licenses, etc.	100.00
Auto cost and depreciation, etc.	1,000.00
Drugs, bandages, etc.	3,000.00
Scientific Journals, etc.	400.00
Railroad fares on professional calls	250.00
Traveling expenses to medical conventions	250.00
Office rent	1,500.00
Miscellaneous expenses	100.00
Total expense	$ 9,600.00
Gross income from other sources:	
Rent from apartment house	10,000.00
Overhead, taxes, etc.	8,000.00
Total Gross Income	$28,000.00
Less deductible items for professional services	9,600.00
Less deductible items incident to apartment building income	8,000.00
Net income, $28,000 less $17,600	$10,400.00
Less personal exemption	$ 3,500.00
Income subject to normal tax	6,900.00
Taxable at ½%	4,000.00
Taxable at 2%	2,900.00
Normal ½% tax on $4,000	$ 20.00
Normal 2% tax on $2,900	58.00
Total Normal Tax	78.00
Surtax (1% on net in excess of $10,000)	4.00
Total Normal and Surtax	82.00
Less Earned Income Credit (See Computation)	9.50
Net Tax Liability	$ 72.50

COMPUTATION OF EARNED INCOME CREDIT

Total receipts from practice	$18,000.00
Expenses incident to practice	9,600.00
Earned Net Income	8,400.00
Less exemption	3,500.00
Subject to normal tax	4,900.00
Taxable at ½%	4,000.00
Taxable at 2%	900.00
Normal ½% tax (on $4,000)	20.00
Normal 2% tax (on $900)	18.00
Total tax on Earned Net Income	38.00
Twenty-five % credit (earned net income	$ 9.50

INCOME TAX BLANKS

Any physician failing to receive an income tax blank should apply to the Collector of Internal Revenue for his district. These districts, together with the name and address of the Collector, and counties comprising such districts follow:

For the Columbus District (Ohio 11th) Collector of Internal Revenue Newton M. Miller, Postoffice Building, Third and State Sts., Columbus, Ohio; comprising the following counties:

Adams, Athens, Coshocton, Delaware, Fairfield, Franklin, Gallia, Guernsey, Hocking, Jackson, Knox, Lawrence, Licking, Madison, Marion, Meigs, Morgan, Morrow, Muskingum, Noble, Perry, Pickaway, Pike, Ross, Scioto, Union, Vinton and Washington.

For the Cleveland District (Ohio 18th) Collector of Internal Revenue C. F. Routzahn, 262 Federal Building, Cleveland, Ohio; comprising the following counties:

Ashland, Ashtabula, Belmont, Carroll, Columbiana, Cuyahoga, Geauga, Harrison, Holmes, Jefferson, Lake, Lorain, Mahoning, Medina, Monroe, Portage, Richland, Stark, Summit, Trumbull, Tuscarawas and Wayne.

For the Cincinnati District (Ohio 1st) Collector of Internal Revenue L. J. Huwe, Custom Building, Cincinnati, Ohio; comprising the following counties:

Brown, Butler, Clarke, Clermont, Clinton, Fayette, Greene, Hamilton, Highland, Miami, Montgomery, Preble and Warren.

For the Toledo District (Ohio 10th) Collector of Internal Revenue Charles H. Nauts, Toledo, Ohio; comprising the following counties:

Allen, Auglaize, Champaign, Crawford, Darke, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Logan, Lucas, Mercer, Ottawa, Paulding, Putnam, Sandusky, Seneca, Shelby, Van Wert, Williams, Wood and Wyandot.

Variety of Viewpoints Emphasize Seriousness of Social Economic Angles in Medical Practice and of Possible Impending Changes

Sixty-three pages of an issue of the *Survey Graphic*, dated January 1, 1930, are devoted to discussions of many questions relating to medical, hospital, public health and nursing services, with special reference to the much-debated question, cost of medical care, and indicating the seriousness of present-day problems of social medicine.

Sixteen persons, several of national prominence, have contributed articles to this symposium, which, according to the editor of *The Survey*, the authors "express their opinions as individuals without committing in policy their organizations".

Those who have set forth their opinions include: Dr. Ray Lyman Wilbur, secretary of interior and chairman of the Committee on the Cost of Medical Care; Dr. Geo. Edw. Follansbee, Cleveland, chairman of the judicial council of the American Medical Association and a member of the executive board of the Committee on the Cost of Medical Care; Dr. Haven Emerson, professor of public health administration, Columbia University; Walton H. Hamilton, member of the faculty, Yale Law School; Dr. Lovell Langstroth, private practitioner of San Francisco; Professor Mary Louise Mark, department of sociology, Ohio State University; Edward A. Filene, Boston merchant; Dr. Shirley W. Wynne, health commissioner of New York City; Dr. Philip King Brown, medical director of the Southern Pacific Railroad; Carroll P. Streeter, editorial staff of *The Farmer's Wife;* Professor Stuart Carter Dodd, department of sociology, American University of Beirut, Syria; C. Rufus Rorem, research staff of the Committee on the Cost of Medical Care; Edwin R. Embree, president of the Julius Rosenwald Fund; Michael M. Davis, director of medical services of the Julius Rosenwald Fund; Dr. Wade Wright, assistant medical director of the Metropolitan Life Insurance Company and Janet Geister, R.N., director of the American Nurses' Association.

The abundance of space devoted to the discussions and the wide range of the subjects make it impossible in these columns to review all of the articles, but some of them are of such outstanding interest to members of the medical profession generally, that they are analyzed briefly in the following paragraphs.

* * *

In what might be considered an introduction to the fifteen other articles, Dr. Haven Emerson gives what he considers the historical background to the present scene in medical history. Dr. Emerson registers the opinion that in the testimonials offered is "no controversy or spirit of antagonism of schools or creeds, schisms of the spirit, or rivalry for material gains, no outburst of malicious criticism, nor ponderous propaganda".

"The dangerous formalities of standardization of needs or services are not proposed by any of our authors", he opines. "They find us vexed, they admit the perplexities of a situation the very antithesis of good bargaining, for patients on the whole either do not know what they want and need, or from whom to get it at a cost within their habit and payment; and physicians find investment in their training and equipment so costly that they are put to it to come out even in their old age after a life of somewhat exacting responsibilities."

Dr. Emerson criticizes members of the medical profession whom he believes have "a somewhat too standardized conception of the social role of medicine in an age bursting with new desires and necessities".

"Surely medicine has its fundamentalists, its sectarians, trade unionists, its codists, who are forever seeking victims among the nonconformists", he says. "While bacteria and the still more evasive ultramicroscopic viruses of disease contrive to exhibit a catholicity of conduct according to the age-old free-for-all biological combat, the man of little mind, the state's right apostle, calls upon vindictive law to forbid the interstate traffic in physician's services. * * * The care of the sick, the cultivation of health gain nothing by creating barriers to the free circulation of medical information whether free or at a price. Nor will the evils of self-advertising or the dangers of pay-clinic commerce with the sick be abated by making a martyr of a physician licensed by the commonwealth to practice his science with art among the people.

"While the business of health is one for all of us and is of deeper import than any of the internecine quarrels between the men and institutions in medicine, we must note the symptoms of disorder which tempt the ready pencil of the lay reporter. Coordination of individual skills under group clinics has been attacked and much of the merit in this method of practice has been obscured thereby. There has been also a kind of sabotage, more passive or vocal than aggressive, and functioning by practitioner groups against the work of health agencies and officers, who in most instances are but putting into effect the advice of the leaders in medical thought", according to his critique.

* * *

"A Doctor Diagnoses the Bills", is the subject chosen by Dr. Geo. Edw. Follansbee, Cleveland, who presents his conception on the side of the practitioners for the middle class "who are professional in their ideals, who love their work, who have a friendly interest in their patients, whose love for their profession makes them jealous for its continued scientific advancement, whose living is dependent upon their practice, and who believe

that although doctors are humanitarians they are entitled to an income sufficient to support their families in comfort, to educate their children and to lay aside during their years of activity sufficient to care adequately for them in their declining years".

The situation in which the average private practitioner finds himself at present is described as follows by Dr. Follansbee:

"Many complaints have appeared in magazine articles and newspaper editorials about 'the high cost of medical care'. Most of these articles have been by laymen not entirely conversant with the most important feature of the prevention and cure of disease—the doctors' part. They have failed to recognize the personal relationship existing between patient and doctor in the application of the science of medicine, constituting the art of medicine. Personal art shares with impersonal science in the success of the practitioner of medicine. The doctor has had little to say except to his fellow practitioners and in his professional publications. Not that he is indifferent, but primarily because he does not know the facts which must be known before a proper cure, if any is needed, can be found, and secondarily because he has been widely charged with commercialism as a cause of the condition and ordered to correct it himself or take the consequences of a correction by the public—a charge which he knows has little foundation in fact, but which he cannot refute until all the factors are known. Furthermore, his nature and his training are such as to make him shun individual publicity even though it be in his own defense.

"That the 'great middle class' do not have or do not pay for adequate medical care is a fact which is well recognized by the profession, but the reasons are not known because the underlying facts have never been determined. The opinions as to cause which have been expressed are based on guess-work, sentiment and emotion, except in rare instances which are not typical of the situation as a whole and are therefore misleading. * * * Let it be understood that medical organization representing the profession is not indifferent nor antagonistic but is as much concerned as the representatives of the laity, though not so audible."

With striking directness, Dr. Follansbee points out the obvious fallacy to charges that the medical profession is largely responsible for the so-called "high cost of medical care".

"Many items enter into the cost of keeping and getting well—that expense broadly called 'cost of medical care' and usually emphasized by the descriptive term 'high' ", Dr. Follansbee declares.

"To the majority of people the items comprising this cost in the order of the percentage of their participation are doctors' fees, hospital charges, nursing expense, drugs, dressings and appliances, and all other expense.

"No one knows just how much is spent by families for patent medicines but the family practitioner in his contact with the families believes the amount will closely approximate that paid to doctors, especially in the country where people are more inveterate patent medicine takers than in the city. Nothing has been said about patent medicines as a factor, but as self-prescribing of patent medicines is generally not only useless but often actually harmful it is a conservative statement to say that the elimination of patent medicines would materially reduce the burden of the 'cost of medical care'. It is known that the ordinary patent medicines and particularly their allies, the 'wonderful discoveries' of mysterious devices and medicines curing all ailments, could not exist a year were it not for advertising; and the doctors are unable to credit with sincerity the publishers who, knowing the uselessness and harmfulness of these preparations and systems, line their pockets with ill-gotten gains from advertising them, and at the same time attack the profession for the 'high cost of medical care'.

"If, as generally supposed, doctors' fees are the preponderating item making adequate care impossible, it would follow that a vast sum is flowing into the pockets of the medical profession. No accurate figures of physicians' incomes are available. Many widely varying guesses and estimates have been made. Each doctor knows comparatively and probably fairly closely the incomes of his fellow practitioners. His guess is that the income of the large proportion of the profession will average in the neighborhood of $5000 to $6000 a year. * * *

"An income of $5000 to $6000 a year does not appear to be excessive for a man who has spent his life up to twenty-eight years of age in study and preparation and some $12,000 in expense before he begins his earning. He is entitled to $720 per year interest on what he has invested to become qualified, and he begins to earn at an age when in other fields the young man is well established. If the cost of medical care is beyond the ability of people to pay, the profession cannot be charged with the major responsibility.

"Hospital expense has risen in the last few years and has added its quota to the total expense of being sick. This increase is justified on the basis of higher operating costs, more efficient service, expanding facilities in diagnosis and treatment, and enlarged demands on the part of patients. Hospitals have been compelled by the advance in medical service to improve their practice and facilities. * * * Today's patient, be his means ever so moderate, demands today's hospital as well as today's radio and car. Furthermore, he demands services he has heard about, such as *X*-ray examinations, metabolism tests and laboratory work whether he really needs them or not, and he demands his special nurse, far too often unnecessarily, and often against the advice of his attending doctor. He frequently enters a private room when a cheaper semi-private or ward bed would do as well. When going to a hospital the attitude of mind of the patient and his family too often is 'the best is none to good,' instead of 'what do I really need'? 'what can I afford'. And people are going to hospitals more frequently than they did. The small apartment and the difficulty and expense of obtaining house servants as well as the vogue of hospital care contribute to this trend. In spite of all this, public hospitals are operated at a deficit.

"The nurses are not getting rich at the expense of the people. * * * The average charge is about seven dollars per day, which means at the end of the year perhaps $1400, an income not greater than that of a day laborer of whom one does not demand three years of training after a high school course. A nurse is very fortunate if she is employed three-fourths of her time. Most nurses have work but little more than half time. A nurse cannot support herself as she should on less. The doctor knows that special duty nurses are employed far more often and longer than they are needed, but patients are loth to dispense with them if their services may be nothing more than those of a maid.

"As the doctor sees it, much of the cost of care of illness is due to useless and harmful self-medication and unnecessary and unjustifiable expense at the desire of the patient himself. To the profession it seems that the family which used to save and lay aside the modest bank account for the inevitable rainy day now hardly exists; that the family now must have what it wants if it can be gotten by hook or crook. Daily necessities which must be paid for are paid to keep credit good, and the balance of the monthly income is allotted to installment purchases. When the greatest necessity of all, health, must be purchased, little if anything is left with which to buy, but yet 'the best is none too good'. Sickness in such a case is a catastrophe, especially if it seizes upon the wage-earner, and usually it is cared for as are catastrophes—seldom with justice to doctor, hospital or nurse."

Dr. Follansbee summarizes this phase of his discussion in the following paragraph:

"The complaint is made about the high cost of *sickness.* Is not the complaint actually about the high cost of *health?* When looked at in this way, the complaint sounds less reasonable. Health is as much of a necessity of life as shelter. One can be happy without fur coats, radios, over-stuffed furniture, automobiles, bootleg booze, vacuum sweepers, and the score of unnecessary trifles that make life easier and more pleasant, but one cannot be happy without health. Perhaps health costs too much for people of moderate means to be able to pay for it what it is worth and what it should reasonably cost, but that proposition has not yet been demonstrated and cannot be until health is approached as a necessity of life as are food, warmth, clothing and shelter."

Expressing his belief that in some respects the present method of the practice of medicine is "inefficient and wasteful", Dr. Follansbee urges that the doctor's individual overhead expenses and investment in equipment be materially reduced if at all possible.

However, he warns that the "elimination of individualized practice and the establishment of groups and clinics is not without serious defects."

"There is a strong tendency toward a division of responsibility a restriction of effort to particular departments, a loss of initiative, especially on the part of the younger men, and a machine-like process in which, to the disadvantage of the patient, the art of medicine becomes lost and because of which the expense in many cases may be unjustifiably increased instead of decreased," he says in amplification.

It also is pointed out that the physician wonders how much the so-called excessive cost of medical care would be reduced if cultists, quacks, advertising fakes and other "parasites" were exterminated.

* * *

"Although birth is an integral part of family life the statistical studies of family expenditures have never included its cost", writes Professor Mary Louise Mark, Ohio State University, in an article, "A Professor Prices Babies", a statistical analysis of what 540 babies cost in the City of Columbus, Ohio.

After explaining in detail the nature of her survey, Miss Mark "finds" that the 540 babies cost on an average $110. Four economic groups were studied, the distinctly comfortable, intermediate, distinctly poor and dependent.

Professor Mark's study indicates that medical costs in obstetrical cases studied were three times as great as all other costs combined and that the proportions spent for medical services tend to decrease with lowered economic status, the explanation being that poor families skimp attention and that doctors adjust fees. It is pointed out that medical costs include what is paid the doctor, hospital and for medicine.

It is contended that "although physicians are criticized for high medical costs, their share of the medical bill is not exorbitant". Figures listed show that of the $82 average for all medical costs, only $47 was paid to the doctor, while $26 was spent for hospital care and $8 for nursing care.

"Many physicians declare that they handle their obstetrical cases at lower rates than their other practice and that they can afford neither to lower their fees or to increase very much their attention to their cases", Professor Mark writes. "When it is recalled that they, like other business men, have losses from bad debts these fees seem very reasonable."

In her conclusions, Miss Mark states that "only the well-to-do and the dependent in Columbus have medical care at childbirth approximating modern standards". While she believes "ignorance and carelessness" are contributing causes for this, she believes that "the chief difficulty is lack of funds".

"As long as the present gap between the cost of standard services and the poor man's purse exist, just so long will mothers who will not accept charity choose the risks of slight care rather than the certainty of staggering bills", she concludes.

* * *

Edward A. Filene, Boston merchant, declares that in his opinion doctors generally are not receiving anything like sufficient pay for their services and that the public as a rule is paying altogether too much for the service which it gets.

Mr. Filene suggests, the injection of modern business methods into medical practice, whereby "work shall be co-ordinated, and that this co-ordination shall be effected on the principle of maximum service at a minimum cost to the consumer". He does not believe that the medical profession alone can find a way to make "the healing business profitable" but that the problem requires the co-ordination of all business—"the general adoption of mass production methods combined with the reduction of unemployment to a mini-

mum and the raising of wages to such a standard that practically everybody shall be able to pay for all the services which he needs".

Mr. Filene offers the suggestion that some progress could be made through the setting up of clinics and health centers, not as charities, but on a strictly competitive business basis.

"That is why I proposed, in an address before a medical association, that doctors would do well to organize as business institutions—ten or fifteen, perhaps, in a single company—to merge their knowledge, to reduce their overhead, to provide every member with the best and latest in equipment which medical service has devised, and to place all these advantages at the service of the public, not at prices which seem either good or merely 'reasonable', but at prices which, upon objective analysis, it is found that the public can afford to pay", he says.

"It is the principle which must be given first attention—the mechanics will follow; and the principle is the principle of serving the greatest possible number at the lowest possible cost," he concludes.

A plea for the joining of hands of the private physician and public health officials is made by Dr. Shirley W. Wynne, health commissioner of New York City.

Dr. Wynne urges that the term "public health versus private practice" be abolished and that all learn to speak of "public health and private practice". He points out that public health work has undergone a "tremendous evolution" during the past 50 years and that "many of the misunderstandings between the medical profession and the health authorities are due to the readjustments which have been part of this evolution".

"The last two decades have witnessed an astonishing amount of curative work done by health departments", he said. "And the relationship of the private practitioner to the public health program has subsequently become an angle of great contention.

"Economically speaking, the medical profession stands on uncertain ground. With medical service pausing at the threshold of a new era—the era of preventive medicine—the economic aspect presents no small problem. Medical science will only cross into that new era successfully if it is accompanied by an economic harmony of cooperation."

Explaining some of the factors which have caused the "economic crisis" among the medical profession, Dr. Wynne likens the situation to an economic triangle "with the private physician, the patient and the health department each clamoring for fair play".

Dr. Wynne admits that free clinics are sometimes patronized by people who can afford the services of a private physician but believes it possible to take the majority of these people away from free facilities and bring them back to the private practitioner.

"The health department is the logical agency to lead the way in educating the medical profession to the type of service demanded", Dr. Wynne believes, pointing to the "back-to-the-private-practitioner" movement which has been inaugurated in New York City as an example of what he thinks can be accomplished.

In discussing the promotion programs which have been carried on in New York, Dr. Wynne says:

"We believe that every doctor should be a public health officer and that it is incumbent upon him to carry into the home of every one of his patients the message of disease prevention. But the public stimulus should come largely from the health department. An elaboration of the plan may involve a modification of the interpretation given the code of ethics which very properly prohibits a doctor beckoning for patients. We ought not to be afraid of such a modification so long as it carries with it greater protection to the public health. It is not difficult to devise ways in which to reconcile a form of controlled advertising by doctors, and yet have it consistent with sound ethics and public health. It is clear that the health department can do much for the doctor. * * * But the doctor must remember that once a health department embarks upon a program to encourage people to go to the private practitioner, he must do his part to keep that patient by his professional competence, moderate charges and effective follow-up work. If the private practitioner fails to enter actively into such a health program, he has only himself to blame if the state steps in to enforce that program."

Dr. Wynne in conclusion predicts that the time is not far off when every large city will have district health centers in strategic points to serve those who are too poor to pay the private practitioner and to provide the physicians of the neighborhood with a central service where *X*-ray facilities and every means of biological analysis will be at their disposal.

* * *

A review of the private group clinic field is presented by C. Rufus Rorem, who says that the factors which must be taken into account in a study of group medical practice, include: the importance of a direct personal relationship between physician and patient; the net income of the average physician, as well as the unusually gifted one; the proper consideration to the patient of moderate means who wishes medical care at a price he can afford to pay; the need for permitting the individual physician to exercise his judgment and to retain a position of respect in society; the proper emphasis on preventive medicine; the avoidance of loss of time to physician and patient through unnecessary diagnosis and treatment.

"The private group clinic illustrates the well known principle that cooperation of specialists is more economical than separate action on their part", Mr. Rorem thinks, but he qualifies his statement as follows:

"But the care and prevention of illness is concerned with human relations. The advantages and limitations of group medical practice must be determined in terms of its ultimate contribution to the welfare of society, which includes both the medical profession and the patients. Other things being equal, it may be that group medical practice can render either more or better medical care at the same cost, or equivalent care at less cost, than

the services of independent practitioners. But are the other things equal? That is the question that physicians and patients will wish to have answered. * * * The ultimate acceptance of group medical practice as a general method of caring for and preventing illness will, of course, depend upon its contribution to the public welfare."

* * *

Experiments being tried in the hospital field and how many hospitals are revamping their setups are among the questions considered in the contribution of Michael M. Davis, director of medical services for the Rosenwald Fund. Mr. Davis' review is based largely on a study recently prepared for the Committee on the Cost of Medical Care by Professor Niles Carpenter, University of Buffalo.

Mr. Davis expresses the opinion that "the hospitals of the country are now facing the problem of the middle class, but are as yet far from meeting it".

Some hospitals which are trying to meet the problem of rate adjustments by consolidation of special charges, inclusive charges for laboratory service, and flat rate services for certain kinds of work, would be pursuing a "more far-reaching policy" if they would "attempt to adjust the middle-class man's rates according to his 'ability to pay' ", according to Mr. Davis.

"Not only income, but size, standard of living and special obligations of the family need be considered, all in relation to the probable amount of the total sickness bill to be paid," he asserted. "What a family 'ought', as distinguished from what they 'can' or will pay, are also confusing discriminations. There is evidence, nevertheless, that the effort to adjust sickness bills to the patient's 'ability to pay' may turn out to be a large-scale American experiment.

"One way of helping the hospital patient of moderate means is to reduce his bill; another way is to make it easier for him to pay it. * * * Hospitals are just beginning to experiment with installment plans. Some reported favorable results to Professor Carpenter; a few declared that the attempt has been unsatisfactory."

Steps which are being taken by some hospitals to get cooperation between physicians and the hospital managements in the total size of the patient's bill are cited. Mr. Davis declares that "cooperation and not recrimination is wanted between physicians and hospital managements", adding the warning that a "hard-driven public" may "force drastic action in the nature of publicly scheduled fees and salaried doctors".

Mr. Davis contends that hospitals and clinics must be centers for health as well as repair shops and that "ways out are also to be found through dealing with the middle-class man's financial problems on an organized instead of an individual basis".

He believes that the "hopeful remedies" ahead are: "first, *prevention*, meaning by that both specific medical and sanitary measures which may wipe out disease and also organized services which will enable more diseases to be cared for in early and less costly stages; second, *administration*, reducing cost by economies in management and installing accounting systems to measure and guide the advance; third, *dealing with the patient's total bill*, through cooperation between the doctor and the institution in which he practices; and, fourth, *making it easier for the patient to pay his bill*, by methods of installment or insurance".

* * *

Extension of group accident and health insurance now offered by insurance carriers is offered as a possible partial solution of the cost of medical care by Dr. Wade Wright, of the Metropolitan Life Insurance Company.

"When we add to that which we know regarding the cost of medical care the facts which are soon to be available we may be able to see even more clearly than now that the real cost of competent medical service is not beyond the means of even those persons very well down in the economic scale," writes Dr. Wright.

"Undoubtedly when doctors, medical societies, hospitals, a portion of insurable individuals and the insuring bodies are ready to work together, and that time should not be far distant, it will be possible to offer insurance coverage which will pay sick working men totally disabled a fair approximation of their customary earnings; to those partly incapacitated, somewhat diminished benefits, and which will meet as well a large portion of the cost of required medical and hospital services."

"It may be done through an extension of the group coverages now offered by great insurance carriers. It may be done by hospitals or by groups of physicians working together, or by communities of prospective patients associated together for mutual attainment of medical care. It is to be doubted if it will be accomplished, certainly in the near future, through the operation of any compulsory plan."

Many other phases of the question of supplying medical and health service to the public are discussed by other contributors, but space does not permit at this time a review of their articles.

Some of the problems being faced by the Committee on the Cost of Medical Care, of which he is the head, are explained by Dr. Ray Lyman Wilbur.

"The High Cost of Nursing" is the topic handled by Janet M. Geister, R.N., who believes that extension of the intermittent or hourly nursing principle will help reduce the cost of illness to the patient of moderate means and at the same time not lower the quality of the nursing service.

Dr. Lovell Langstroth argues in his article, "Patients Cry for It", that readjustment of living habits will bring about better health and incidentally reduce the cost of medical care.

The field of industrial medicine is analyzed by Dr. Philip King Brown of the Southern Pacific Railroad.

Carroll P. Streeter describes the system inaugurated in rural Canada where physicians and hospitals are maintained by communities on a full-time salary and subsidy basis.

Professor Stuart Carter Dodd, of the American University of Beirut, Syria, tells of community health work in that country.

A picture of the activities of the big foundations is drawn by Edwin R. Embree, of the Rosenwald Fund.

Fraudulent "Health Propaganda" Through Radio Broadcast and Otherwise Reaches Dangerous Proportions=== Encouraging Opposition is Organized.

Ohio may play a prominent role in the nation-wide campaign which has been launched to exclude from radio programs propaganda issued by medical quacks and unscrupulous commercial healing concerns, exploiting worthless patent medicines, alleged remedies, and pseudo scientific treatment methods, which are deemed by medical and public health authorities to be a serious menace to the health and welfare of the public.

The move to "weed out these quacks and clear the air of their poisonous propaganda" was inaugurated by Dr. Shirley W. Wynne, commissioner of health of New York City, who on December 26, made an official protest to the Federal Radio Commission and asked that agency's assistance in investigating and solving this "national problem of importance".

Dr. Charles A. Neal, director of the Ohio State Department of Health, when informed of Dr. Wynne's action, in a statement to the press pledged the support of Ohio to the air-cleaning drive.

Dr. Neal's statement on the question read as follows:

"The Director of Health of Ohio most heartily endorses the action of Health Commissioner Wynne of New York City in requesting the Federal Radio Commission to exclude from the air all quack doctors and healing concerns.

"While time has not permitted the tabulation of the amount of harm due to advertising by air of the quack doctors and pseudo scientists, the ill effects of this manner of advertising becomes each day more apparent to public health authorities. It would be a great benefit to the public if all concerns, who as individuals or corporations having a product or method of treatment for which they claim health or medicinal properties, would be compelled to submit the same to a committee of their respective State Medical Associations and State Health Departments for approval before permission to broadcast was granted to them.

"Health authorities and the medical profession, together with the Federal Radio Commission should unite in this most splendid and worthy project of Dr. Wynne's to keep the air clean."

Health Commissioner Wynne in his communication to the Federal Radio Commission pointed out the menace surrounding much of the false health information now being disseminated over the radio and asked the Commission to act, if possible, in the matter. His letter to the Commission read in part:

"In the ordinary course of our work, we have uncovered what we believe a serious situation which seems to indicate that the radio is being fairly widely used by companies alleging to cure diseases through the sale of various products and services. These claims are, in many of the cases we have investigated, completely unfounded, fraudulent and inimical to the public health.

"It seems that many of the charlatans who have been driven from the newspapers have found a haven of activity in the radio broadcast. These commercial concerns engage the facilities, not so much of the larger reputable radio stations, but of the smaller stations.

"New York being one of the largest centers of population, these programs pour into us from nests of smaller stations in surrounding communities outside of our own city and state.

"I write to ask whether there is anything in the existing laws which you might invoke to stop this practice. If there is not, is there any kind of voluntary scrutiny which can be set up to weed out these quacks and clear the air of their poisonous commercial propaganda?

"While we are constitutionally opposed to the principle of censorship, we feel that the practice which has been adopted by the leading radio stations of submitting their sponsors' health products and service for the approval of local health departments, might be an effective way of handling this among the other stations.

"We are convinced from the information that we have, that this is a national problem of importance, and will be glad to place any material that we have at your disposal looking towards some constructive remedy."

Dr. Wynne was notified immediately by the Federal Radio Commission's office that his complaint had been taken under advisement. It was pointed out that similar complaints have been received, and that the Commission has been notified of definite movements on the part of Better Business Bureaus in various sections of the country to curb radio advertising of this nature.

Following a conference between Dr. Wynne and individual members of the Federal Radio Commission, Dr. Wynne announced that the specific denial of any radio censorship in the Federal radio censorship in the Federal Radio Act precludes the possibility of immediate action against the radio-advertising quack and fake medicine firms, but that he hoped to obtain beneficial results soon through conferences with representatives of the National Association of Broadcasters, the American Association of Advertising Agencies and the National Better Business Bureau to discuss the compilation of a code of broadcasting ethics for the guidance of radio stations.

"In addition to the medical quacks," Commissioner Wynne stated publicly, "the code would govern innumerable questionable radio activities.

"As our most immediate action we will call a

conference of the local radio owners, asking them to exclude from the air all programs not approved by a committee representing the Academy of Medicine and the county medical societies.

"I am opposed to any form of censorship. I believe that the same, if not better, results can be obtained by a voluntary scrutiny of programs by the broadcasting stations. This has been shown by the effective exclusion by the larger stations of programs inimical to the public health. The smaller stations, which I believe are not aware of the damage they do, are the chief offenders.

"Further action against the broadcasters, who invite queries and mail literature falsely alleging immediate cures, will be taken through the postal authorities. Although we have not decided specifically when the complaints will be filed, I am determined to drive these people off the air, whether it be through voluntary cooperation of the broadcasting stations or the resources of public education, the postal authorities, the Federal Trade Commission, which has power to issue orders against fraudulent advertising, and the Federal Radio Commission."

Dr. Wynne has invited complaints from anyone having been deceived, with the sources of his department at the disposal of the public to check up any advertisement, or to procure advice in any way relative to their health.

Dr. Wynne further pointed out that he had been informed by the Federal Radio Commission that except where specific complaints, and verbatim reports of the broadcast are filed with the Commission, it is powerless at the present time to act.

On the same day Dr. Wynne filed his protest against use of the air by quacks and fraudulent healing concerns, W. G. Campbell, director of the Food, Drug and Insecticide Administration of the U. S. Department of Agriculture stated orally that newspaper advertising by the same class of purveyors of alleged cures is making it difficult to assure the public that it is getting medicines in accordance with the pure food and drugs act.

Mr. Campbell recalled that the pure food and drugs act does not give the Department of Agriculture authority to act against fraudulent advertising, its power being limited to regulation of labeling, pointing out that when the reader notices claims in advertising that a certain medicinal preparation will cure certain diseases, the reader in many cases is already persuaded that the medicine is effective, and buys it with that idea in mind, although the same claims are omitted on the label of the product.

Mr. Campbell suggested the establishment of an office within the Pure Food and Drug Administration to cooperate with advertising managers who themselves refuse to permit the appearance of fraudulent advertising in their columns as the desirable remedy to this situation.

Mr. Campbell said he was gratified to note that in discussions of the proposed Smoot amendment to the pure food and drug act many editors expressed intentions of seeing that their advertising space was free of misstatements.

The Smoot amendment, now pending in Congress, would revise the pure food and drugs act to include not only tobacco and tobacco products within its scope, but would also amend the act so that claims made for food and drug products in any advertising medium subject to interstate commerce control should come under the same strict regulations now applied to labels and other descriptive matter, on, within or around the container in which the product is packed.

Up until July, 1926, fraudulent advertising was robbing the public of more than $500,000,000 a year, according to W. E. Humphrey, federal trade commissioner, whose article "We Quit Playing Tag With Fraud", published in the January, 1930, issue of *The Nation's Business*, tells of the campaign which has been inaugurated by the Federal Trade Commission against false and misleading propaganda in the newspaper and magazine fields.

Mr. Humphrey relates how restraining orders issued against the producers of worthless products, whose false advertisements were fleecing a gullible public, failed to stop the evil, when advertisers thus named merely changed the name of their product, moved their offices and continued to do business as before.

He then described how the Commission hit upon the plan which is now in effect, namely, that of issuing formal complaints which charged both an advertiser and the publisher of a magazine or newspaper that carried misleading advertising with acts and practices that were to the prejudice of the public and the competitors of the advertiser, and also charging that the acts constituted unfair methods of competition in commerce.

"Because of this complaint, some newspapers and a part of the trade press criticized the Commission most severely", he declared. "The general criticism increased when the Commission * * * cited not only the advertiser and the publisher, but also the advertising agency involved. * * * Undoubtedly most of the opposition and criticism arose from misunderstanding of the Commission's purpose and from ignorance of the widespread circulation of fraudulent advertising.

"The campaign led to a trade practice conference at which practically all the leading publishers approved the Commission's action and pledged their support. The conference also voted unanimously in favor of cooperation between the National Better Business Bureau and the Commission in suppressing fraudulent advertising. The success of the proposition is largely due to this excellent cooperation. * * The results have been exceedingly gratifying and not a single recommendation of the board has been rejected. * * * We have not found a publisher nor an agency who was not perfectly willing to abide by the Commission's ruling. It plainly shows that the publishing and advertising industries not only desire to eliminate frauds, but are capable of administering their affairs in a highly satis-

factory manner when given the necessary authoritative machinery. With the exception of those who apparently specialize in disseminating fraudulent advertising, the publishers who have attended the board's hearings have expressed a willingness to cooperate in suppressing the schemes complained of.

"All the cases the special board has handled prove the fallacy of the charge that the Commission was attempting to set up a censorship of advertising. Nothing reaches the board except the copy that has been published and on which the Commission has ordered a complaint. * * * I am confident that the work of the Commission and the special board has saved the public more than $50,000,000 in the last six months, a sum that formerly was lost mainly by the poor, the sick, the credulous and the ignorant. Judging by the result of the last six months, the success of the campaign against fraudulent advertising is certain. How long it will take to stop fraudulent advertising cannot be definitely determined. I believe that within a year 90 per cent of those advertisements that are false and misleading upon their face will be suppressed."

Mr. Humphrey cited several cases of fraudulent advertising which had been tried by the Commission. In one minor case, investigators found that although the advertiser occupied one small room and employed but one assistant, he was doing a business of nearly $60,000 a year with a fake physical development scheme, he said. Another case revealed that a small advertiser was doing about $325,000 worth of business a year on a hair treatment. Still another case showed an anti-fat advertiser was doing a business of approximately $600,000 annually.

Legality of Contraceptive Birth Control Information and Methods as Found in State and Federal Statutes.

Recent conferences in Ohio under the auspices of the National Committee on Federal Legislation for Birth Control have revealed that there is considerable misunderstanding by some Ohio physicians on whether it is legal for them to give contraceptive information.

An opinion on whether it is legal for a physician in this state to give such information, treatment or material recently was given the Cleveland Maternal Health Clinic by the law firm of Thompson, Hine and Flory of that city.

"Examination of the General Code", the written interpretation of the Ohio statutes rendered by the Cleveland attorneys stated, "makes it clear that a physician is privileged to give such information, treatment, or material, although it is illegal for a layman to do so. Furthermore, it is not necessary that there be any disease-reason, but the physician may give this help, to anyone who consults him.

"The Ohio statutes expressly provide that 'regular practitioners of medicine' are not covered by the laws against contraception (General Code 13037). There is only one exception to this, and that is that not even a physician may distribute a 'secret drug or nostrum.' It is therefore desirable that any preparation for this purpose, carry its formula on its container.

"The only jurisdiction of the Federal laws, is as to use of the mails, and interstate commerce. Not even a physician can legally use the mails, or common carriers in interstate commerce, for the conveyance of contraceptive information or material."

The Ohio statutes on which the preceding opinion is based are found in Chapter 12 of the General Code, and read as follows:

Section 13033—Whoever sells, gives away, or keeps for sale or gratuitous distribution, a secret drug or nostrum purporting to be exclusively for the use of females, or for preventing conception, or procuring abortion or miscarriage, shall be fined not more than one thousand dollars or imprisoned not more than six months or both.

Section 13034—Whoever prints or publishes an advertisement of a secret drug or nostrum purporting to be for the exclusive use of females, or which cautions females against its use when in a pregnant condition, or publishes an account or description of a drug, medicine, instrument or apparatus for preventing conception, or for procuring an abortion or miscarriage, or keeps for sale or gratuitous distribution a newspaper, circular, pamphlet or book containing such advertisement, account or description, shall be fined not more than one thousand dollars or imprisoned not more than six months, or both.

Section 13035—Whoever sells, lends, gives away, exhibits or offers to sell, lend, give away or exhibits, or publishes or offers to publish or has in his possession for such purpose, an obscene, lewd or lascivious book, pamphlet, paper, writing, advertisement, circular, print, picture, photograph, drawing, representation, figure, image, case, instrument or article of an indecent or immoral nature, or drug, medicine, article or thing intended for the prevention of conception or for causing an abortion, or advertises any of them for sale, or writes, prints, or causes to be written or printed, a card, book, pamphlet, advertisement or notice giving information when, where, how, of whom or by what means any of such articles or things can be purchased or obtained, or manufactures, draws, prints, or makes such articles or things, or sells, gives away or shows to a minor, a book, pamphlet, magazine, newspaper, story paper or other paper devoted to the publication, or princially made up, of criminal news, police reports, or accounts of criminal deeds, or pictures and stories of immoral deeds, lust or crime, or exhibits upon a street or highway or in a place which may be within view of a minor, any such books, papers, or pictures, shall be fined not less than fifty dollars nor more than two thousand dollars or imprisoned not more than five years, or both.

Section 13036—Whoever deposits in a postoffice or places in charge of a person to be carried or conveyed, any of the obscene, lewd, indecent, or lascivious articles or things named in the next preceding section, or a circular, handbill, card, advertisement, book, pamphlet, or notice of the kind therein named, or gives oral information where, how, or of whom such obscene, lewd, indecent or lascivious articles or things can be purchased, or obtained or knowingly receives any of them with intent to carry or convey, or knowingly carries or conveys to them, except in the United States mail, shall be fined not less than fifty dollars or imprisoned not more than one year or both.

Section 13037—EXCEPTIONS—The next three preceding sections shall not affect teaching in regularly chartered medical colleges, the publication of standard medical books, or regular practitioners of medicine or druggists in their legitimate business.

A recapitulation of the laws of the various states regarding the giving of contraceptive information by physicians, made by the National Birth Control Committee, shows:

1. Thirty-one states where physicians may legally give information on prevention of conception, namely, Alabama, Arkansas, Colorado, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Maryland, Nebraska, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin and Wyoming.

2. Four doubtful states, namely, Connecticut, Kansas, Massachusetts and New Jersey.

3. Eleven states where physicians may legally give information on prevention of conception but cannot publish such information, namely, Arizona, California, Idaho, Maine, Michigan, Montana, Pennsylvania, Washington, Louisiana, Missouri and Nevada.

4. Two states where physicians may legally give information on prevention of conception for cure and prevention of disease, namely, Minnesota and New York.

5. One state where physicians may not give information on prevention of conception, namely, Mississippi.

The principal object of the National Committee on Federal Legislation for Birth Control, as explained in a bulletin issued by the committee, is not to seek revision of any of the state laws regarding contraceptive information, but to urge amendment of the United States Penal Code so that it will not be unlawful to use the United States and common carriers for the transmission of advice concerning contraception.

Animal and Human Diseases

To attain the highest degree of effectiveness in his work, the research worker in the field of human medicine must be prepared to carry his investigations, if necessary, into the cow stable, the hog pen, or the hen house, and likewise so must the research worker in the field of veterinary medicine be prepared to go to the sick rooms of human beings to aid in solving the baffling problems of human disease, said Dr. J. R. Mohler, Chief of the Bureau of Animal Industry, Department of Agriculture, in a paper presented by him at a meeting of the medical section of the American Association for the Advancement of Science at its annual meeting at Des Moines, Iowa.

The subject of Dr. Mohler's paper was "Animal Diseases—a Menace to the Human Family." The fields of human medicine and veterinary medicine have long passed the point where they are little concerned with each other—the maintenance of human health and the preservation of human life are coming to have more and more to do with the science of animal medicine, he said.

"In instituting any measures for the control of animal diseases," says Dr. Mohler, "the people most intimately concerned in formulating the program of control are brought to a consideration of two prime factors involved—one purely economic and the other pertaining to public health. In the case of certain of our animal plagues, and chief among them some of the most dreaded—as, for example, hog cholera and foot-and-mouth disease—the incentive for suppressing them lies almost solely in the economic money values involved; but there are many other scourges quite as important to the animal husbandry of our country which are also communicable from animal to man, and here the control problem has both the economic and the human health aspects.

"In dealing with these affections which are transmitted from the animal to man, the veterinarian is in a position, through his special training, to end his confrere in human medicine a helping hand, not only by actually reducing or eliminating entirely the sources of infection, but also through cooperating in cases where the sources of the diseases of humans are obscure and where there may be possibility of tracing the infection to animal origin.

"The success of the present great campaign to eradicate tuberculosis from domestic livestock is due largely to the interest which owners of livestock are taking to free their families and the purchasers of their products from the dread and danger of contracting tuberculosis, especially through the medium of raw milk. The inspectors who are doing the work of testing cattle for tuberculosis often hear pathetic encouragement from livestock owners whose families have been afflicted by tuberculosis, no doubt transmitted in many cases from the cow."

Dr. Mohler discussed the menace to the human family of livestock diseases—for example, tuberculosis, glanders, foot-and-mouth disease, undulant fever, rabies, trichinosis, tularemia, rat-bite fever, erysipelas, cowpox, and measles of cattle and swine.

"Not only is there close relationship between animal diseases and human health, but the study of livestock problems and sciences dealing with animal diseases contributes in a surprising degree to human health and welfare, he concluded."

W. H. H. Miller, former head of the Illinois State Department of Education and Registration, has been found guilty of conspiracy to sell medical and dental licenses to persons not qualified to practice and has been sentenced to seven months and one day in jail and fined $2000. He has filed a motion for a new trial. Five other persons, indicted with Miller in the recent Illinois diploma mill scandal, are awaiting trial.

Third Annual Ohio Safety Congress Held in January

Ohio's third annual All-Ohio Safety Congress was held January 14, 15 and 16, at the Neil House, Columbus, under the auspices of the Division of Safety and Hygiene of the Ohio Industrial Commission.

The Congress was officially opened Tuesday, January 14, with addresses by Governor Myers Y. Cooper, James J. Thomas, mayor of Columbus, and Wellington T. Leonard, chairman of the State Industrial Commission, followed by talks on safety work generally by C. E. Pettibone, president of the National Safety Council and vice president of the American Mutual Liability Insurance Company, Boston, and Isaiah Hale, safety superintendent of the Santa Fe Railroad, Topeka, Kansas.

At a dinner Tuesday evening for employers and plant executives, L. B. Webster, executive secretary of the Ohio Manufacturers' Association, presided as toastmaster.

On Wednesday morning, January 15, a regional meeting of the employes' publication section of the National Safety Council was held. The program for this meeting was contributed by C. A. Ward, editor of the *Pure Oil News*, Columbus; W. A. Grieves, secretary of the Jeffrey Manufacturing Company, Columbus; Professor Willis Wissler, College of Commerce and Administration, Ohio State University, and A. E. McKee, associate editor of the *Ohio State Journal*, Columbus.

A general session Wednesday afternoon was addressed by James J. Davis, secretary of the United States Department of Labor. Others who spoke at this session were Miss Frances Perkins, industrial commissioner of the State of New York, W. T. Blake, director of the Department of Industrial Relations of Ohio, and Dr. Sidney M. McCurdy of the Youngstown Sheet and Tube Co.

A foremen's safety training sectional meeting was held Wednesday evening, speakers at this session being R. W. Jenkins, assistant supervisor of vocational education, Columbus; F. A. Lauerman, safety engineer of the Interstate Iron and Steel Company, Chicago; C. E. Brehmer, employment and safety superintendent of the Timken Roller Bearing Company, Columbus, and J. F. Biehl, member of the state board for vocational education, Cincinnati.

Marcus Dow, manager of the Department of Safety and Personnel of the Motor Transit Management Company, Greyhound Lines, Chicago, was one of the speakers at a general session held Thursday morning, January 15. Other speakers at this session were: Dr. H. H. Meyers, Frigidaire Corporation, Dayton; Ethelbert Stewart, Commissioner of Labor Statistics, U. S. Department of Labor, and Fred M. Wilcox, chairman of the Wisconsin Industrial Commission.

A get-to-gether luncheon was held Thursday noon, presided over by J. M. Woltz, safety director of Youngstown. Judge Edward T. Dixon, Cincinnati, was the principal speaker.

Numerous section meetings were held during the three-day Congress. Among those who spoke at these sessions were:

E. A. Ellis, Wheeling Steel Corporation, Wheeling, West Va.; J. T. Kidney, Goodyear Tire and Rubber Company, Akron; T. B. Farrington, B. F. Goodrich Company, Akron; William H. Miller, William Miller and Son, Cincinnati; Franklin Zellhoefer, the Koehring Company Milwaukee; George F. Mooney, secretary of the Associated Building Contractors, Columbus; Charles H. Duncan, secretary of the Ohio Contractors' Association, Columbus; Charles J. Case, secretary of the Ohio State Building Trades, Cincinnati; Harry E. Hiers, Ohio Boxboard Company, Rittman, Ohio; L. R. Wendt, Hinde and Dauch Company, Sandusky; N. H. Bergstrom, Bergstrom Paper Company, Neenah, Wisconsin; H. H. Henry, Empire Steel Corporation, Mansfield; H. L. Sain, Frigidaire Corporation, Dayton.

A. L. Button, Peerless Electric Company, Warren; L. A. Landy, representative of the public employes of Cleveland; L. D. Lyle, Fisher Body Company, Cleveland; J. W. Beall, Ohio Steel Foundry Company, Lima; George A. Seyler, the Lunkenheimer Company, Cincinnati; Louis Resnick, publicity director of the National Society for the Prevention of Blindness, New York; Michael P. Grady, Pennsylvania Railroad Shops, Canton; Professor Fred E. Ayer, Akron University; W. L. Schneider, B. F. Goodrich Company, Akron; A. P. Regal, Philadelphia Rubber Works Company, Akron; C. L. Hungerford, Firestone Tire and Rubber Company, Akron; Clinton D. Smith, Cleveland Railway Company.

R. P. Buchman, Ohio Bell Telephone Company, Columbus; E. E. Evans, Whitehouse Stone Company, Toledo; M. J. Meckling, Clarkson Coal Mining Company, Cleveland; William B. Guitteau, the Ohio Crushed Stone Association, Columbus; W. M. Powell, Medusa Portland Cement Company, Cleveland; A. E. Liles, Liles Laundry Company, Columbus; William F. Johnson, New York Central Railroad, Columbus; Harry Hoerr, Model Laundry Company, Cincinnati; A. D. Harris, state fire marshall's office; E. F. Gallagher, Ohio Inspection Bureau, Columbus; W. T. Filmer, Youngstown Sheet and Tube Company.

Artificial Age Limitations

Members of the Cincinnati City Board of Health registered an indignant protest at a recent meeting when informed that the Civil Service Commission had indicated a preference for applicants under 40 years of age for the position of district physician.

One member of the board pointed out that men and women in the professions do not complete their education until they are nearly 30 years of age and because of this fact the period of availability for public service would be only 10 years if the reported policy of the commission is followed.

"Either the standard wage scale must be increased or the age limit at which a man is looked upon as being available to industry raised if we are to escape old-age pensions," one board member warned.

Aside from this potential danger to the plan of placing an age limit on labor, the foolishness of any system of judging the competence of a physician by his age is perfectly obvious.

The large majority of the outstanding members of the medical profession are well on the far side of forty. The experience of years of practice is certain to be of much value to the worth and ability of most physicians. The Cincinnati commission apparently has given very little thought to the question or it would not have proposed such an absurd procedure.

Large Sums for Health-Welfare Endowments

Health activities continue to rank high among the beneficiaries of philanthropy according to a review of philanthropic enterprises for the year 1929, recently published by the John Price Jones Corporation, fund-raising consultants.

The vast sum of $2,450,720,000 was contributed to philanthropic activities in the United States during the past year, an increase of $120,120,000 over the year 1928. The philanthropy was divided as follows:

Religious purposes, $996,300,000; education, $467,500,000; gifts for personal charity, $279,760,000; organized charity, $278,710,000; health, $221,510,000; foreign relief, $132,000,000; fine arts, $40,000,000; play and recreation, $20,900,000; miscellaneous reform activities, $14,040,000.

Two gifts made during the year were given special mention in the report, that of $10,000,000 by Senator James Couzens of Michigan to promote health and welfare of children, and the Maurice and Laura Falk gift of $10,000,000 for educational, religious, charitable and philanthropic purposes.

The year 1930 got away to a flying start in the field of philanthropy on January 5, when Former President Calvin Coolidge, ex-Governor Alfred E. Smith, New York, and Julius Rosenwald, Chicago philanthropist, executors under the will of the late Conrad Hubert, financier in the electric field, announced the distribution of approximately $6,000,000 left to charity by Hubert.

A number of hospitals, several health enterprises and several medical schools were among the 33 institutions and organizations selected to receive bequests. The list of beneficiaries included:

St. Vincent's Hospital, New York, $500,000.

Boy Scouts of America, $500,000.

Girl Scouts, Inc., $500,000.

Provident Hospital, Chicago, $500,000.

Beekman St. Hospital, New York, $500,000.

Children's Aid Society, New York, $200,000, for a children's center.

American National Red Cross, New York, $375,000 for a building to be constructed by the New York Chapter in New York City.

Young Men's Christian Association of Jersey City, N. J., $250,000 for erection of an addition to the central building.

New York Foundlings Hospital, $50,000.

International Migration Service, Inc., American branch, $50,000.

Jewish Mental Health Society, New York, $250,000 toward building a new hospital.

National Committee for Mental Hygiene, $250,000.

Jewish Theological Seminary of America, $250,000.

Young Men's Hebrew Association, New York, $175,000, toward a new building.

The first million dollars of the residuary estate will go to these eight charities:

University of Chicago, $250,000 for the school of social service administration.

Henry St. Settlement, New York, $100,000.

American Foundation for the Blind, Inc., $100,000.

Beth Israel Hospital Association, New York, $200,000, toward completion of its new building.

Howard University, Washington, D. C., $200,000, toward building a medical school at the university.

William and Mary College, Williamsburg, Va., $50,000.

Catholic University of America, Washington, D. C., $50,000.

University of Virginia $50,000.

Ten other institutions each receive 10 per cent of the balance of the estate. They are:

Kent School, Kent, Conn.; New York Post-Graduate Medical School and Hospital; Georgia Warm Springs Foundation, Inc.; Leonard Wood Memorial for the Eradication of Leprosy; Clarke School for the Deaf, Northampton, Mass.; Madonna House, New York; trustees of Smith College, Northampton, Mass., for the Smith School for social work; Johns Hopkins University, Baltimore, for its institute of law; Maternity Center Association, New York; Rollins College, Winter Park, Fla.

New Vital Statistics Forms in Use in Ohio

New forms for recording births and deaths in Ohio are now in use, the revised certificates having been distributed by the State Department of Health shortly after the first of the year.

The most important change is in the birth certificate, in which, for the first time, space is provided for analysis of the occupation of the father and mother, under four headings. Heretofore, the birth certificate carried a simple statement of the "occupation and industry" of the parents. The four questions asked on the new form are:

Father—Work, profession, or particular kind of work done.

Industry or business in which work was done.

Date (month and year) last engaged in this work.

Total time (years) spent in this work.

Mother—Trade, profession or particular kind of work done.

Industry or business in which work was done.

Date (month and year) last engaged in this work.

Total time (years) spent in this work.

The same change as to occupation affects the new death certificate, with an additional change in the medical certificate of death. This form asks for the principal cause of death and related causes of importance, in order of their onset. For example, if death was due to an external cause, the manner and nature, as well as the place of injury, must be indicated.

Another change in the death certificate is that which requires the giving of the correct residence of the deceased, in order that he may be identified as a resident of the state or a non-resident.

In a statement concerning the new forms, Dr. Charles A. Neal, state director of health, said:

"Ohio for many years was the only state which made a serious effort to obtain even the meager occupational data asked for on the old certificates. New York tried for several years to enforce a requirement for this information, following Ohio's lead, but with what success is not known, as none of its information has been published. Now the Bureau of Census at Washington, largely influenced by the measure of success attained here, is calling on all the states in the registration area to include occupational data in both birth and death certificates."

Attention Is Called to State Law on Placement and Adoption of Illegitimate Children

Necessity for continuance and increase of cooperation between physicians, juvenile courts and parents, and the Division of Charities of the State Department of Public Welfare in the matter of working out plans for unmarried mothers and the placement or adoption of children is emphasized in a recent statement issued by the Division of Charities.

Attention is called to the state law which provides that no child under two years of age shall be given into the temporary or permanent custody of any person, association or institution which is not certified by the Division of Charities, unless the written consent of the Division of Charities has been secured or a commitment made by a juvenile court. The law also states that "it shall be unlawful for any persons, organizations, hospitals or associations which have not been certified by the Division of Charities to advertise that they will adopt children or place them in foster homes, or hold out inducements to parents to part with their offspring, or in any manner knowingly become a party to the separation of a child from its parent or guardians, except through a juvenile court commitment."

It is pointed out that records reveal placement of infants by physicians and hurry-up adoptions without proper compliance with this law and investigation by a licensed children's agency. Many such placements made by physicians, innocently and undoubtedly because they are not properly informed as to the provisions of the law, later prove very unsatisfactory, the Division declares in urging Ohio physicians to cooperate as fully as possible with it in the problem of the unmarried mother and her child, "one of the most serious problems confronting not only parents and guardians, but also public officials and social agencies."

The Division stresses its policy in offering its services to the juvenile courts of the state, physicians and parents in working out plans for any unmarried mother under the age of 21, or for any illegitimate child even though the mother may be over age. The Division will accept the guardianship of the unmarried mother by a commitment from the local juvenile court, will make arrangements for the girl's confinement in a maternity hospital of good standards and will endeavor to adjust the situation after the birth of the child. An effort is made to establish paternity legally and to secure the support from the father.

Some idea as to the importance of the problems of the adoption and placement of children is obtained from figures for the year 1927, showing that seventy counties reported the adoption of 1,382 children during the year, 446 of them being under two years of age.

Statistics over a five-year period, 1923-1927 inclusive, show 11,043 illegitimate births in Ohio.

In citing these figures, the Division declares that "much suffering has come not only to the children but to the mothers of children and also foster parents through lack of proper investigation before adoption."

Medical-Social Angles of Ohio's Penal and Correctional System

A new parole system for inmates of Ohio's penal institutions has been put into effect by State Welfare Director H. H. Griswold. Under the plan, the state is divided into nine districts with a parole officer for each district to supervise the men and women paroled to that district.

A report recently submitted to Mr. Griswold by Warden P. E. Thomas, Ohio Penitentiary, reveals that during 1929 that institution had a net gain in population of 603.

The population of the prison at the close of the year was 4,703. A total of 1,170 were paroled, died, escaped or removed to the London prison farm or other branch institutions during the year.

Of the total number of prisoners in the penitentiary, 612 are serving life terms. There are 231 serving time for murder in the first degree; 289 for murder in the second degree; 954 for burglary; 867 for robbery; 311 for larceny and 246 for forgery.

The report shows that 2,600 of the prisoners have dependents and that 325 of them had served time in the Boys' Industrial School at Lancaster and 928 in the Ohio Reformatory at Mansfield. Sixty-one of the prisoners are college graduates and 242 are high school graduates. One hundred and thirty-five have attended college and 742 have attended high school. A total of 3,361 attended grade school but only 1,129 finished, while 472, or 9.8 per cent of the total population, are illiterate.

The average age at the time of entrance to the institution is 34.08, the report revealed. It also showed that more than 1,000 inmates have had military service; that 1,823 are married men and that 1,891 have never been married. The average cost of maintenance per man per year is $230.

A recent report of the National Society of Penal Information on penal conditions in Ohio should prove interesting reading for physicians of this state, especially because of their interest in the health problems resulting from certain conditions referred to in the report, and because of the medical profession's desire to aid in the physical and mental rehabilitation of many thousands of Ohio's criminal population.

Prison conditions in Ohio are pictured as poor in the report which refers especially to the prevalance of overcrowding idleness and lack of a

definite educational program in some of the state's penal institutions.

"The ancient plant at the state penitentiary in Columbus, one of the largest prisons in the country, suffers from a condition of overcrowding worse than that in any other large prison," the report charges. "The need of another large institution in the Ohio penal system has been apparent for many years, but the state is only now taking steps to alleviate the conditions at Columbus, and nothing is being done to provide a second main prison. Ohio like many other states, has allowed its prison population to get far ahead of its building program and socially minded citizens should demand legislative action without delay. When overcrowding is coupled with the amount of unemployment found here, the state of affairs becomes increasingly critical.

"The second striking characteristic of this prison is the idleness. Not only are the shops old but they are overcrowded. Even so, there is not enough work for the large population and rom 1,200 to 2,000 men are on the idle list."

The report also claims that the salaries of officials in the Ohio Penitentiary are "notoriously low," and that the "lack of an educational program" at the London Prison Farm "should be remedied without delay."

Discussing conditions at the Mansfield Reformatory, the report says:

"This reformatory with a population of 2,900 (including 350 men employed on farms and at other state institutions) is the largest in the country. It is at the same time one of the most overcrowded of all the prisons and reformatories and has a problem of unemployment as bad as any institution of major importance."

The Marysville Reformatory for women is referred to in the report as the largest institution for women in the country. The population there has "long since grown beyond its intended limits," the report points out, and adds:

"Like the Ohio Penitentiary and the Reformatory for Men it suffers from both overcrowding and unemployment. Whether or not the state policy has been to consider this institution unimportant is a matter for conjecture."

The report especially emphasized that it was not criticizing in any way the officials directly in charge of administration at any of the institutions but was attempting to show the backwardness of the state program in dealing with its criminal population.

State Industrial Commission Cases

For the first time in its history, the State Industrial Commission began work Monday, January 6, with a clear docket.

A new policy recently adopted by the Commission, that of holding hearings on Friday afternoon and Saturday morning, made it possible for the board to hear all cases docketed for the preceding week.

Efforts will be made, according to Wellington T. Leonard, chairman of the Commission, to adhere strictly to this new plan of disposing, either temporarily or permanently, of all cases submitted to the Commission each week by the end of that week.

During December the Commission held 1,509 special hearings, an increase over November, when 1,224 cases were given special hearing.

A report recently submitted to the Commission by Dale W. Stump, supervisor of claims, shows that during 1929 a total of 1,118 occupational disease claims were filed. The total number of occupational disease claims filed with the Commission since August 4, 1921, when the Occupational Disease Amendment to the Workmen's Compensation Law became effective, was 6,644 up to January 1, 1930.

A reduction in industrial fatalities for the month of November, 1929, has been reported to the Commission by the Division of Safety and Hygiene, following a review of statistics for that month. The 91 fatalities reported during November are 13 less than those reported during October and five less than during November, 1928.

The total number of claims, both fatal and non-fatal, filed during November was 21,639, a reduction of nearly 4,000 from the October record. The severity of November injuries amounted to 862,125 days lost or over 112,000 days less lost time than for October and over 2,500 less than in November, 1928.

Arts and Hobbies of Cleveland Physicians

The first Art and Hobby Exhibit of the Cleveland Academy of Medicine was a huge success, according to a report published in the January, 1930, issue of the *Cleveland Academy Bulletin*. Thousands viewed the display which consisted for the most part of creations by members of the Academy.

Among the exhibitors were:

Oil painting—Drs. Jackson Blair, John E. Dalton, Ida Fleming, John F. Stephan and M. Paul Motto.
Pastel—Drs. Ivan I. Yoder and John E. Dalton.
Water color—Drs. Arthur M. Chatham, John E. Dalton, Bradley M. Patten, Joseph T. Wearn and W. H. Whitslar.
Pen and ink—Drs. Elmer L. DeGowin, Henry John, Louis J. Karnosh and Ivan I. Yoder.
Pencil—Drs. Herman C. Stevens, Ivan I. Yoder and N. L. Farinacci.
Modeling and sculpture—Drs. M. Raymond Kendall, Bradley M. Patten, John F. Stephan, F. P. Corrigan and A. B. Eisenbrey.
Jewelry—Dr. Frederick W. Hitchings.
Metal craft—Drs. N. Lester Farinacci and H. D. Piercy.
Photography—Drs. Eugene J. Arday, William E. Bruner, Howard T. Karsner, H. C. King, G. N. Morrill, Harry V. Paryzek, John F. Stephan, N. C. Yarian, Frederick C. Waite, David Steel, C. P. Huston and W. H. Whitslar.
Wood work—Drs. Louis J. Karnosh and Raymond C. McKay.
Literary—Dr. Henry John.
Miscellaneous—Drs. Alfred A. Jenkins, Myron Metzenbaum, H. D. Piercy, North W. Shetter, J. S. Gardner and Edward E. Woldman.

The Museum of Historical and Cultural Medicine of the Medical Library Association, of which Dr. Howard Dittrick, also was on exhibit.

Deaths in Ohio

Samuel G. Adair, M.D., Beverly; Ohio Medical College, Cincinnati, 1876; aged 82; former member of the Ohio State Medical Association; died January 7. Dr. Adair practiced for a short time at Marshfield before locating in Beverly in 1879, where he continued in active practice until a few weeks before his death. He was a Civil War veteran, having enlisted at the age of 15. Surviving him are his widow, one daughter, and three sons, two of whom are members of the medical profession—Dr. Frank E. Adair of New York City and Dr. Wilbur G. Adair, of Cincinnati.

Arthur C. Bauer, M.D., Norwood; Medical College of Ohio, Cincinnati, 1893; aged 59; former member of the Ohio State Medical Association; died January 8 of heart disease. With the exception of a few years at Milan, Indiana, as medical director of a sanitarium, he had spent his entire life in Cincinnati. Dr. Bauer was formerly Hamilton County coroner, and at the time of his death was school physician for Melwood School, Norwood. His widow and a daughter survive him.

George R. Bissell, M.D., Columbus; Pulte Medical College, Cincinnati 1877; aged 76; former member of the Ohio State Medical Association; died December 25. Dr. Bissell retired four years ago after practicing in Columbus for more than forty years. He is survived by his widow and one son.

Edmund C. Carr, M.D., Coshocton; University of Wooster, Medical Department, Cleveland, 1875; aged 79; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 6 after a long illness. Dr. Carr practiced for six years at Holmesville before locating in Coshocton, where he had practiced for nearly fifty years. Dr. Carr was held in high esteem by the whole medical profession of Holmes county, and had held various offices in the Holmes County Medical Society. Dr. Carr had served as local surgeon for the Pennsylvania railroad company since 1881, and had served three terms on the local board of education. Three daughters and one son, Dr. James G. Carr of Chicago, survive him.

Charles M. Deem, M.D., Columbus; Eclectic Medical College, Cincinnati; aged 80; died January 5 of heart disease. Dr. Deem had practiced in Franklin and Madison counties 53 years before retiring two years ago because of ill health. He is survived by his widow, four sons, three step-daughters, one sister and one brother, Dr. George W. Deem of Delaware.

John A. Flanagan, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1884; aged 68; died December 14 of pneumonia. Dr. Flanagan was a life-long resident of Cincinnati, where he had practiced for over forty years. He had served as city physician and during the war was a member of the draft board of District Seven. Surviving him are his widow, one son and two daughters.

Carl A. Hamann, M.D., Cleveland; University of Pennsylvania School of Medicine, Philadelphia, 1890; aged 62; member of the Ohio State Medical Association; Fellow of the American Medical Association; Fellow of the American College of Surgeons; member of the American Surgical Association; the American Association of Anatomists, and the American Association of Pathologists; died January 12 at Charity Hospital following three week's illnes of heart disease. Dr. Hamann located in Cleveland in 1893, as professor of Anatomy in Western Reserve University School of Medicine, and in 1913 was chosen dean of the School of Medicine, which position he held until November, 1928, when he resigned to devote more time to private and philanthropic activities in the field of medicine. In addition to his work at Western Reserve, he was active in developing the Cleveland City and Charity Hospitals. He was founder of the Hamann Museum of Anatomy and Anthropology. Surviving him are his widow, a daughter and a son.

Martin E. Heydemann, M.D., Cleveland, Harvard University Medical School, Boston, 1909; aged 49; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 10 from strangulation by a bathroom girdle, presumably suicide.

William H. Hopkins, M.D., Norwood; Miami Medical College, Cincinnati, 1871; aged 81; died December 18 of heart disease. Dr. Hopkins practiced in Cincinnati until his retirement several years ago. He is survived by one son.

Howard B. Lyons, M.D., Miamisburg; Eclectic Medical College, Cincinnati, 1877; aged 73; died December 1. Dr. Lyons retired from active practice several years ago. He is survived by his widow.

William J. Morgan, M.D., Manchester; Eclectic Medical College, Cincinnati, 1903; aged 50; member of the Ohio State Medical Association and the American Medical Association; died December 11 of heart disease. Dr. Morgan had practiced in Manchester and Adams county for over twenty years. Surviving him are his widow, two sons and a daughter; his father, three sisters, and four brothers, three of whom are physicians.

John H. Spicer, M.D., Toledo, Toledo Medical College, 1898; aged 74; died December 21. Dr.

Spicer had practiced at Archbold, Waterville and Whitehouse. He is survived by his widow, two sons, and two sisters.

Homer J. Shatto, M.D., Colebrook; Western Reserve University School of Medicine, 1875; aged 86; died December 30. Dr. Shatto had practiced in Colebrook and Ashtabula county 55 years. He is survived by three sons.

Leonard E. Stutsman, M.D., Dayton; Ohio State University, College of Medicine, Columbus, 1915; aged 36; member of the Ohio State Medical Association and the American Medical Association; died December 4 of heart disease on board a ship bound from San Diego to Havana. Dr. Stutsman had practiced in Dayton fifteen years. He is survived by his widow, one daughter, his parents and one brother.

James M. Wittenmeyer, M.D., Peebles; Cincinnati College of Medicine and Surgery, 1874; aged 81; former member of the Ohio State Medical Association; died January 1 of asthma. Dr. Wittenmeyer had practiced in Adams county more than 50 years before his retirement a few years ago. Surviving him are his widow, two sons, one sister and two brothers, one of whom is Dr. Charles Wittenmeyer of Arcanum.

KNOWN IN OHIO

Joseph M. Houston, M.D., Elm Grove, West Virginia; Starling Medical College, Columbus, 1904; aged 56; died December 14 at Ohio Valley General Hospital, Wheeling, as a result of injuries received when his car was struck by a bus. He began practice at Sherrard, and in 1912 moved to Elm Grove. During the World War, he was stationed at Fort Benjamin Harrison. Besides his wife, he is survived by two sons, three daughters, and two sisters.

John G. Pettit, Hopemont, West Virginia; Illinois Medical College, Chicago, 1902; aged 49; died December 20, at a Clarksburg hospital, following an emergency operation for intestinal abscess. Dr. Pettit was born in Athens county, and taught school for several terms at Trimble. He located at Clay, West Virginia, following graduation, and later went to Weston, West Virginia, where he remained as assistant to the superintendent of the state hospital for the insane for 18 years; at the time of his death was superintendent of the state tubercular sanitarium at Hopemont. He is survived by his widow, two daughters and one son; his mother and two brothers.

Charles H. Sawyer, M.D., Globe, Arizona; Western Reserve University School of Medicine, 1880; aged 73; former member of the Ohio State Medical Association and Fellow of the American Medical Association; died December 27, Dr. Sawyer practiced for 35 years in Mineral City, Ohio. Nine years ago he moved to Arizona, and until his retirement last April was employed as government physician on an Indian reservation. Surviving him are his widow, one daughter and one son; a brother and a sister residing at Kent, Ohio, where the body was brought for burial.

John D. Spelman, M.D., Pittsburgh; University of Cincinnati, College of Medicine, 1911; aged 40; former member of the Ohio State Medical Association, died December 17 of appendicitis. Dr. Spelman practiced in Cincinnati following his graduation. At the opening of the World War, he went to the Mexican border with the First Ohio Field Hospital Corps, and later went overseas. After his discharge, he assumed the assistant directorship of Mt. Sinai Hospital, Cleveland. From there he went to the Touro Infirmary at New Orleans, and later moved to Pittsburgh, where he was superintendent of the Montefiore Hospital. Surviving him are his widow, his parents, three sisters and one brother.

Periodic Health Examination Suggestions

Within the past few months, the periodic health examination campaign now being staged by the five county medical societies of Greater New York, with a combined membership of 10,000 physicians, has been favorably commented on frequently by writers in medical journals, as well as law publications.

These observers are inclined to believe that the activity which has been shown by the medical profession of Gotham in this move to get Mr. Averageman into the habit of submitting to a physical examination periodically has done much to stimulate the interest of New Yorkers generally in the value of preventive medicine.

One writer is especially pleased with a chart which has been formulated by the committee directing the campaign and which suggests that the average person should have a periodic physical examination as follows:

The infant should be examined once a month.
From 6 months to 2 years, once every three months.
From 2 years to 5 years, once every six months.
From 6 years to 25 years, once a year.
From 25 years to 45 years, once every two years.
From 45 years to 65 years, once a year.
From 65 years and over, once every six months.

This same writer suggests that it would be a fine idea for physicians in all parts of the country to have cards printed with this information on them and to see that one accompanies every bill mailed to patients; also that a generous supply be available in the reception room of every physician's office. Obviously that chart could not apply to many unusual cases. The danger of standardization is likewise obvious.

NEWS NOTES of OHIO

Ironton—Announcement has been made here of the appointment of Dr. Miriam Marting, daughter of Dr. and Mrs. W. F. Marting, as an intern at the Cincinnati Deaconess Hospital. Dr. Mariam Marting is one of three sisters who have studied medicine at the College of Medicine, University of Cincinnati. Dr. Anne Marting is now engaged in private practice and Miss Esther Marting is now in her sophomore year in the College of Medicine.

Cincinnati—Dr. A. W. Nelson has been appointed a member of the senior urologic staff at Deaconess Hospital.

Cleveland—Doctors prefer golf, according to a survey of physicians' hobbies and recreation conducted by the Cleveland Academy of Medicine. Tabulation of answers to a questionnaire sent to members of the Academy shows that 458 out of every 1000 members prefer golf to all other forms of outdoor amusement. Among hobbies listed were airplane flying, raising dogs, pitching horse shoes and playing dominoes.

Akron—An organization known as the Dental and Medical Acceptance Corporation has been formed here for the purpose of lending money on promisory notes given by dental and medical patients. A plan of monthly payments is being worked out.

East Liverpool—A modern laboratory for the convenience of East Liverpool physicians and dentists has been opened here by Drs. J. A. Fraser, M. D. McCutcheon, Albert Michaels and H. A. Turk. It will be in charge of Miss Mary Lapsley, formerly of McAfee, Ky., and a graduate of the School of Laboratory Technique, University of Louisville.

Wellsville—Announcement has been made that Dr. Jennings King, Jr., who has been practicing orthopedic surgery in Pittsburgh will move here soon and occupy the offices formerly occupied by his father, the late Dr. J. M. King, who was councilor of the Seventh District of the Ohio State Medical Association.

Columbus—A series of lectures for advanced students and practicing physicians is being offered at the Ohio State University, College of Medicine. Two speakers on the program arranged so far are Dr. Elliott C. Cutler, professor of surgery, Western Reserve University, School of Medicine, and Dr. Andre Crotti, chief of staff at White Cross Hospital, Columbus.

Hamilton—Dr. A. L. Smedley has been named physician at the Butler County Jail, succeeding Dr. F. M. Vereker.

Conneaut—Dr. Roger Cutting has announced that he will move to Los Angeles and that his practice here will be taken over by Dr. L. E. Needham, formerly of Port Clinton.

Massillon—Dr. John H. Cooper of this city has been elected a member of the executive committee of the American Medical Section of the University of Vienna, according to word received here. Dr. Cooper has been studying at Vienna for several months.

Dayton—Dr. P. L. Gunckel is acting as city physician during the absence of Dr. Leo Schram who has been granted a six-months leave of absence for study at Vienna.

Ashland—Dr. L. G. Sheets has been named physician at the county home, succeeding Dr. George Riebel.

Miamisburg—Dr. C. C. Borden, who has been practicing here for the past 10 years, has announced that he will give up his practice here and go to New York City where he will take a year's post-graduate course in the Children's Section of the New York Post-Graduate Hospital.

Sunbury—Dr. D. O. Hankinson, a graduate of the Ohio State University, College of Medicine, has opened offices here.

Mansfield—Dr. Vernon A. Lockwood has moved to St. Augustine, Florida, where he will be chief surgeon for the East Coast Hospital and the East Coast Railways Company. He has been physician and surgeon for the Empire Steel Corporation here.

Mt. Gilead—Dr. A. C. Richards has been appointed physician at the Morrow County Home, succeeding the late Dr. W. C. Bennett.

Beach City—Dr. C. S. Palmer, who underwent a goiter operation recently, has resumed his active practice here and at Massillon.

Toledo—Clara Stein, Toledo, newspaperwoman, and Dr. C. W. Noble, local physician, have announced their marriage last summer at Cincinnati.

Dayton—The Montgomery County Medical Society has taken possession of a suite of rooms on the third floor of the Fidelity Building. The new headquarters is composed of an auditorium with a seating capacity of 300; two large library rooms, a kitchen and several study rooms.

Dayton—A resolution passed by the Montgomery County Medical Society urges the Dayton city commissioners to pass legislation making pasteurization of milk compulsory.

Bellaire—Dr. P. L. Ring has recovered from an illness which confined him at St. Luke's Hospital, Cleveland, where he was taken when stricken during a visit in Cleveland.

Lima—Dr. J. H. J. Upham, dean of the Ohio State University, College of Medicine, spoke at the Ohio State Day celebration held by Allen

County alumni. Dr. H. L. Stelzer was chairman of the committee on arrangements.

Cleveland—Dr. Alfred A. Jenkins was elected president of the Cleveland Charity Hospital Alumni Association at a recent rally of the alumni. Dr. H. M. Hall, Wheeling, West Virginia, was named vice president and Dr. J. E. Hallisy, Cleveland, secretary.

Toledo—Eight-eight new members were admitted to membership in the Toledo Academy of Medicine during 1929, it has been announced.

Toledo—H. S. Stevens, managing editor of *Medical Economics*, recently made a study of the activities and plans of the Toledo Academy of Medicine while on a visit to Toledo.

Toledo—Dr. C. E. Hufford has taken offices with Dr. John T. Murphy.

Toledo—The Education Committee of the Toledo Academy of Medicine has arranged with the *Toledo News-Bee* to conduct a daily health column in that paper during the coming year.

Toledo—Dr. R. E. Boice has announced that Dr. Malcolm G. Bourne is now associated with him.

Toledo—Dr. G. W. Dunlap has returned from a hunting trip to Mexico.

Toledo—Henry C. Gerber, Jr., has been named executive secretary of the Toledo Academy of Medicine, succeeding William J Burns who has accepted a similar position with the Wayne County Medical Society of Detroit. Mr. Gerber is a graduate of the College of Commerce and Journalism, Ohio State University, in the Class of '21.

Cincinnati—The Board of Directors of the University of Cincinnati has decided to name the new institute for physiological research, the Charles Franklin Kettering Laboratory, in honor of Mr. Kettering of Dayton.

Fostoria—Dr. T. T. Rosendale has returned from several months trip abroad.

Xenia—Dr. R. L. Haines, Jamestown, has been appointed coroner of Greene County, succeeding Dr. F. M. Chambliss, who has been named city commissioner.

Lorain — Dr. F. P. Corrigan, Cleveland, addressed a recent meeting of the Lorain Rotary Club.

Fostoria—Dr. G. H. W. Bruggemann, formerly of Columbus, has opened offices here.

Cincinnati—Dr. Harry G. Brown and Dr. Elmer Werner have been commissioned first lieutenants in the Medical Reserve Corps.

Middletown—Dr. W. H. Williams, Mrs. Williams and their two daughters, Zoe and Lois, have returned from Europe where Dr. Williams spent several months in post-graduate work, studying the greater part of the time at the University of Vienna.

Columbus—J. E. Butler, Columbus attorney, has presented the State Library with an edition of the "Medical and Surgical History of the War of the Rebellion," in three volumes, issued in 1875 by the government. The volumes were the property of Mr. Butler's father, a physician.

Steubenville—Dr. J. C. M. Floyd, dean of Steubenville's physicians, and former president of the Ohio State Medical Association, gave an illustrated talk on cancer before the Y Men's Club recently.

Mansfield—Dr. L. J. Karnosh, assistant professor of nervous and mental diseases, Western Reserve University, School of Medicine, will give the second lecture of the series being sponsored by the Mansfield Public Library. Dr. Karnosh will speak, March 5, on "Gestalt Psychology in Teaching and in Understanding Brain Function."

Cleveland—Dr. and Mrs. J. R. Driver have returned from a trip to the West Indies.

Cleveland—The staff at St. Luke's Hospital held a memorial meeting recently in honor of the late Dr. S. W. Kelley.

Cleveland—Representatives of the Cleveland Academy of Medicine on the Board of Directors of the Cleveland Association for Criminal Justice are: Dr. Charles W. Stone and Dr. H. D. Piercy.

Akron—Dr. L. E. Brown has returned after a two months post graduate study in London, Edinburgh, Paris and Vienna.

Akron—Dr. F. B. Roberts is taking a course in surgery in Philadelphia.

Columbus—Dr. James A. Beer, secretary of the Columbus Academy of Medicine, who retired as health commissioner of Columbus January 1, has opened a general laboratory in the Beggs Building, East State Street.

Piqua—Dr. A. B. Frame celebrated his ninetieth birthday anniversary on January 4.

West Jefferson—Relatives here have received word of the serious illness of Dr. George M. Kerr at Fort Lauderdale, Florida, where Dr. Kerr and his family are spending the winter.

Galion—Dr. W. E. Baker and Dr. D. G. Arnold have been appointed physicians at the County Home and County Jail.

Ironton—Dr. W. F. Marting took office January 1 as Ironton's first police judge.

Cleveland—Dr. Louis Karnosh is giving a series of lectures on "Anti-Social Personalities" under the auspices of the Cleveland group of the American Association of Hospital Social Workers.

Cleveland—Dr. J. J. Thomas has been elected president of the Cleveland City Club.

Cleveland—Dr. Alan F. Finlayson has returned from Berlin where he has been taking post graduate study in psychiatry.

New Physicians Licensed in Ohio by State Medical Board

Dr. T. H. George, Cleveland, was elected president of the State Medical Board at the midwinter meeting of the Board, held in Columbus, January 7.

Dr. J. K. Scudder, Cincinnati, was elected vice president; Dr. J. H. J. Upham, Columbus, treasurer, and Dr. H. M. Platter, secretary.

Following a discussion of reciprocity relations with the District of Columbia, reciprocity with the District was terminated by the Board because of the additional Basic Science examinations required by the District of Columbia Medical Board from men holding licenses to practice medicine and surgery in Ohio.

The Board approved the Columbus Children's Hospital for affiliated service in pediatrics in nurse training work.

The scholastic requirements for limited practice in mechanotherapy were raised by action of the Board. Under the new ruling applicants for entrance to examinations for mechanotherapy licenses must have in addition to four years high school training, 27 months of residence work in a recognized school of mechanotherapy. Previously only 24 months of residence schooling were required.

Successful applicants for licenses in medicine and surgery and in the various limited branches, who took the examinations given by the Board in December, were announced. Licenses to practice medicine and surgery were granted to 24. Other licenses approved were: One osteopath, three chiropractors, two electrotherapists, 25 mechanotherapists and 24 masseurs.

Charles Berkowitz, Warren, graduate of Northwestern University, received the highest grade, 91.1, in the December examinations in medicine and surgery. H. J. Lefkowitz, Cleveland, graduate of Johns Hopkins University, was second with a grade of 89.2, and J. R. Rampona, Youngstown, graduate of Jefferson Medical College, was third with a grade of 89.

Others granted medicine and surgery licenses, with the intended place of residence and school of graduation, were.

Lowell G. Hunter, Youngstown, University of Louisville; Emil M. Shebesta, Cleveland, University of Wisconsin; Howard G. Bruss, Toledo, University of St. Louis; Joseph John Manley, Cleveland, University of St. Louis; Alfred A. DeCato, Warren, Jefferson Medical College; Arthur J. Attridge, Piney Fork, Harvard University.

Harry J. Jefferson, Columbus, Howard University; Matthew Ginsburg, Toledo, University of Pennsylvania; Charles W. Wade, Canton, Howard University; Louis G. Herrmann, Cleveland, Washington University; Lewaaron Hartzell Moyer, Youngstown, Temple University; Forest D. Speaks, Cincinnati, Howard University.

Alfred John Elkins, Cincinnati, University of Minnesota; Warren Burton Taylor, Jr., Cleveland, Hahnemann Medical College; John Harold Hershey, Lakewood, University of Toronto; Reginald P. Vivian, Akron, University of Toronto; Alec L. Phinister, Cleveland, University of Edinburgh; Richard E. Metcalf, Dayton, University of Nebraska; Edith P. Brown, Warrensville, George Washington University, and William Joseph McCarthy, Cleveland, University of St. Louis.

The following were granted licenses in medicine and surgery through reciprocity:

Arthur I. Fink, Cleveland, Johns Hopkins University; Charles F. Frankman, Dayton, University of Michigan; Harold M. Golden, Cleveland, University of Berlin; Charles F. Grattidge, Marion, Iowa State University; Paris L. Gray, Oak Hill, Maryland Medical College; William B. Greene, Akron, Meharry Medical College; Adolphus W. Guest, Athens, Western University of London, Ontario; Orrin D. Hudnutt, Youngstown, University of Michigan.

Benjamin L. Hume, Mentor, Medical College of Virginia; Francis C. Lane, Youngstown, Marquette University; Bert McCord, Akron, Northwestern University; James W. Nelson, Dayton, University of Maryland; Lewis A. Nimmons, Akron, Medical College of South Carolina; William Plummer, Keokuk Medical College; John W. Schauer, Cleveland, Rush Medical School; Albert P. Seltzer, Steubenville, Temple University; Bruce Sisler, Alliance, Hahnemann Medical College; Calvin B. H. Snead, Cincinnati, Meharry Medical College; Paul C. Spangler, Cleveland, University of Maryland.

James H. Swan, Cleveland, Northwestern University; James A. White II, Cleveland, Medico-Chirurgical College; Perino B. Wingfield, Yellow Springs, University of Georgia; Mary E. Fetzer, Cleveland, Western Reserve University; Wilmer C. Stevenson, Toledo, Northwestern University; Walter F. Becket, Dayton, Meharry Medical College.

PHARMACISTS TO MEET

Fifty-second annual convention of the Ohio State Pharmaceutical Association will be held aboard a Great Lakes steamer during a four-day trip from Cleveland to Mackinac Island, next June 15, 16, 17 and 18, according to a bulletin just issued by the Council of the O. S. P. A. The itinerary of the excursion-convention also will include Detroit and Sault Ste. Marie.

The entire trip will cost $30 per passenger and an attendance of 350 will be necessary to guarantee the chartering of the boat. A special reservation payment of $10 is now being asked by the Council from all members of the association who are planning to make the journey.

New Department, Medical College, Ohio State University

Board of Trustees of Ohio State University has authorized expansion of the College of Medicine, through the establishment of a department of experimental medicine and surgery.

Purposes of the new department, according to Dr. J. H. J. Upham, dean of the College, will be "to coordinate the medical research in medical and surgical fields in the college, to work with the clinical members of the present staff and to inaugurate a program of scientific investigations that should be very fruitful of results".

The personnel will include at first a professor, an assistant and such technicians and clerical assistants as are necessary.

Dr. Upham believes that the new department "promises to greatly enhance the influence of the college of medicine in scientific and clinical medical fields", and gives to that college work similar to what is already being carried on by the college of agriculture, college of engineering and several other departments. A man to head the new department has not been named.

Revision on Classifications of Causes of Deaths

A summary of some of the more important developments of the recent Conference for the Revision of the International Classification of Causes of Death, held in Paris, has been made by the *Statistical Bulletin* of the Metropolitan Life Insurance Company.

Among the transactions of the conference, the *Bulletin* selects the following as of chief interest:

1. For the first time serious consideration was given to the subject of classifying jointly reported causes of death. The United States was invited to take the necessary steps toward collecting and comparing all existing codes relating to joint causes, with a view to determining how to obtain more uniform methods by the several countries.

2. New rubriques were added to provide for separate tabulation of cancer of the respiratory system and the male genital organs. Cancers of the pharynix will henceforth be classified with those of the buccal cavity, instead of being associated with growths of the esophagus, stomach, liver and gall-bladder. Cancers of the duodenum will be studied along with those of the stomach, liver and biliary passages.

3. Separation of the valvular and muscular heart diseases in mortality statistics was agreed upon. Gangrene, which had hitherto been allocated to the diseases of the skin and cellular tissues, was transferred to the circulatory disease class.

4. Deaths from puerperal septicemia accompanying abortions or miscarriages which had hitherto been classified as due to puerperal septic infection will now be classified as due to abortions, but will, nevertheless, continue to be distinguished from all other deaths from abortions so that it will be possible to know the total number in which puerperal septicemia was concerned.

5. Fatal accidents were discussed and the opinion voiced that the modern safety movement should have more data than are now available concerning fatal mishaps. Countries were urged to incorporate in their mortality statistics much more detailed information on these deaths.

PERMANENT HOME PROPOSED FOR CINCINNATI ACADEMY

Members of the Cincinnati Academy of Medicine have decided not to erect the contemplated $200,000 permanent home for the Academy in the down-town district but have authorized the Committee on Permanent Home, assisted by a subcommittee, to take steps to acquire a site within a short distance of McMillan Street and between Hughes High School and Alms Hotel.

At a recent meeting of the Academy, the Committee on Permanent Home reported that after seven months investigation it had reached the conclusion that a site on the Hilltop should be selected for the building. It was explained that parking of automobiles by members could not be done in the downtown district at present and that conditions would become worse in time to come.

Members of the Committee who have spent much time in surveying available sites were of the opinion that several properties on Locust Street, in the vicinity designated by the Academy, would be desirable and suitable for the type of structure planned. Power to obtain options on several tracts in view was granted the committee.

A. M. A. SCIENTIFIC EXHIBITS

Announcement has been made by Dr. Paul N. Leech, director of the Scientific Exhibit for the 1930 Annual Meeting of the American Medical Association at Detroit, that applications for space must be in the hands of the Committee on Scientific Exhibits before next March 20.

The exhibit at the Detroit session of the A. M. A. will be located in the Detroit Masonic Temple, an excellently equipped building that will also house the registration bureau, technical exhibits and sections of the scientific assembly, according to the announcement.

Dr. Leech emphasizes the necessity of presenting exhibits in a manner that will stress their scientific value through the use of carefully worded explanatory placards or legends, and particularly by personal demonstration by the investigator himself.

Judging from the interest already manifested and the demand for application forms for space, the next Scientific Exhibit will probably be the most outstanding in the history of the A.M.A., Dr. Leech states.

Carbon Monoxide Safeguards

To prevent the possibility of passengers in motor buses being suffocated by carbon monoxide gas, the Ohio Public Utilities Commission has ordered drivers on all bus lines in Ohio to observe strictly a regulation which requires that "no driver shall leave his vehicle at any time without stopping the motor and shifting into low or reverse gear".

"A recent near fatality in the City of Cleveland has impressed the commission with the danger arising from the violation of this rule", a letter issued by the Commission states, and adds:

"The exhaust from any motor is charged with poisonous carbon monoxide gas, which is colorless, odorless and tasteless, and if inhaled may cause death within five minutes.

"The danger of suffocation may be present even though the bus comes to a stop in the open air, as the gas may enter the bus in sufficient quantities to imperil life. It is especially dangerous to permit a motor to run while the car is standing in a closed garage which is not properly ventilated. Buses that enter enclosed passenger stations are dangerous if the motor is permitted to run while the passengers enter or alight.

"Heaters operated by exhaust from the motor should be carefully inspected and the outlets protected so as to avoid any danger of fire and safeguard the passengers and their property."

Plans for the New Dental Hygiene Bureau, State Department of Health

A newly-created bureau of dental hygiene in the State Department of Health began functioning with the advent of the new year, under the direction of Dr. L. G. Bean, of Athens, a graduate in dentistry from Western Reserve University.

Concerning the opening of the new bureau, the *Ohio Health News*, official publication of the State Department of Health, said:

"Much is expected from the organization of this work in the department, although the work itself is not new. Much has been accomplished, even without a dentist, to pave the way for the greater results that may be expected from segregation of the work in its own bureau. Dentistry has a definite place in the public health field. Aside from the work which specifically applies to the dentist, a complete program cannot be put on in child hygiene—nutrition, infant welfare, prenatal work, school hygiene and personal hygiene—without including dentistry.

"Dr. Bean will first make a survey of all the dental hygiene work being done in Ohio. The result will be studied and from it will be learned —if possible—the best way for one man to reach seven millions of people. The dental work will be correlated with that of the Department of Health and with that of the Ohio State Dental Society, with which the Department wishes to cooperate in the closest maner possible.

"One point at which the Dental Society can be of much assistance to the Department will be in the encouragement of dentists to give more attention to the deciduous teeth. This will be the specific task of the Committee on Mouth Hygiene; for without this cooperation there is little chance for the movement to succeed.

"Under Regulation 19 of the Ohio Sanitary Code, a dentist is required to report cases of venereal disease and the Department believes that if a dentist can diagnose a secondary or tertiary stage of syphilis of the mouth, nose or throat, he also is capable of recognizing the Koplik spots of measles, strawberry tongue of scarlet fever, geographic tongue, Vincent's agina, actinomycosis, diphtheria, septic sore throat and many others.

"The dentist often is the first one to see occupational diseases. He knows the effects of metallic poisoning, such as lead, phosphorus, radium, mercury, bismuth, copper discolorations and the effects of acids as in plaster or pickler. He often 'contacts' the wearing down of the teeth, as in lathers, tanners and tailors. Nearly all the occupational diseases now being compensated by the Industrial Commission of Ohio were placed on the list through the Department of Health. Unless dentists report the cases that come under their observation there is small chance of having them included.

"The Department of Health will endeavor to make the new project a means of service to the people of the state. Through the assistance of the State Dental Society and its associated groups it is hoped to educate the public to appreciate the importance of dental hygiene and the important bearing that the condition of the mouth has on the general health of the individual."

The Smallpox Situation in Ohio as Seen by Health Department

Smallpox, in near-epidemic proportions in several sections of the state, continue to place a black mark on Ohio's record in the war against communicable disease.

With December reports incomplete, there were recorded at the State Department of Health up to December 30, 1929, 526 cases of smallpox during December. The month of November had 557 cases, or almost three times as many as October, whose 187 cases were considerable more than double the September figure.

During 1929, with figures incomplete, there were recorded at the State Department, 2,996 cases in the state, with the probability that many light cases or those otherwise diagnosed were never reported. The year's total was 142.4 per cent larger than the total in 1928, exceeds the 1927 total by 92.3 per cent and the 1926 total

by 40.5 per cent. Not since 1925 has the smallpox toll in Ohio been as large as during the year which just ended.

Quoting the *Ohio Health News*, official bulletin of the State Department of Health: "The year, therefore, has gone out in a blaze of yellow, reflecting at once the weakness of the state's vaccination law and a low grade of community intelligence with respect to personal and community responsibility for the most horrible of all infectious diseases."

Figures by months in 1929 indicate an irregular course of the disease early in the year. There was a steady rise from the first of the year for five months, with figures as follows: January, 158; February, 178; March, 210; April, 234; May, 311. Then came a decline for four months, with the following figures: June, 285; July, 164; August, 106; September, 80, which was the low point of the year. Then came the swift upward sweep of the last three months of the year, the final figures on which are incomplete.

In two weeks, there was an increase from 263 to 353 cases and in five weeks to December 28, there were 724 new cases reported.

Licking County and the City of Marion each reported 27 cases in one week, raising their totals for the year to 76 and 91 cases respectively. Galion, up to December 15, had a total of 104 cases and Crawford County had 39 cases. On December 30, 37 health districts, in virtually all parts of the state, were on record as having reported 142 cases within eight days.

Officials of the State Department of Health believe that some health officials throughout the state have not been active enough in trying to halt the spread of the disease and at the same time they are loud in their praise of the work which has been done by others.

The accomplishments in Shelby County by Dr. B. S. Stephenson, health commissioner, are cited by state officials as a model for all health commissioners. Stephenson recently completed the vaccination of 1,500 school children who had never been vaccinated, raising the immunized total of school children of Shelby County to 75 per cent. Five schools, under the direction of Dr. Stephenson, achieved the honor of being 100 per cent vaccinated.

The commissioner sent 200 letters to business men of Shelby County asking them the number of their employes, the number of employes vaccinated and the number willing to be vaccinated. Responses were received from 98 per cent of those addressed and only one letter indicated that the writer was opposed to the program of vaccination.

Attention also is called to a communication sent out by another county health officer, stating:

"This department believes that every merchant should encourage vaccination to protect business. All members of the school boards should see that resolutions are passed by their boards requiring each school child to be vaccinated before entering school. All persons interested in public welfare should encourage members of the school boards to use this method to protect the school child."

According to state health officials, physicians of the state generally have cooperated fully with health officials in attempting to prevent spread of the disease.

A Mental Hygiene Program

A large variety of subjects will be discussed at the International Congress on Mental Hygiene to be held at Washington, May 5-10, according to a tentative program which has been drafted by a committee under the direction of Dr. Frankwood E. Williams, medical director of the National Committee for Mental Hygiene.

Some of the topics to be discussed are:

Magnitude of the mental hygiene problems as a health problem.
Organization of community facilities for prevention, care and treatment.
Organization of the mental hospital and its role in community life.
Psychopathic hospitals and psychopathic wards in general hospitals.
Care and treatment of mental patients outside of institutions.
Organization of special types of clinical service.
Types of personnel required in mental hygiene work.
Methods of training of different types of personnel.
Clinical and social research in the field of mental hygiene.
Teaching of mental hygiene and psychiatry in the medical schools.
Mental hygiene in industry.
Psychiatric social work.
Mental hygiene aspects of delinquency, dependency and other types of social maladjustment.
Marital relationships.
Social aspects of mental deficiency.
Mental hygiene and education.
Special problems of adolescence.
Parent and teacher training.
Problems of pre-school period.

Only about five per cent of the passengers in air transportation are subject to air sickness, which is much less prevalent than seasickness, according to a statement issued recently by the Daniel Guggenheim Fund for the Promotion of Aeronautics. A survey made by the Fund shows, it is said, that the question of air sickness is primarily a psychological one; secondary, one of bad ventilation, and only in a third and relatively minor degree, a matter of the disturbed motion of the plane alone. Air sickness must be distinguished from altitude sickness, the report points out, explaining that the physical factors in the latter are diminished atmospheric pressure, diminished partial pressure of oxygen and lowered temperature and humidity.

PUBLIC HEALTH NOTES

—During 1929 marked progress was made in sewage treatment by cities in Ohio, according to a report of the Engineering Department of the State Department of Health. New, modern plants were placed in operation at Alliance, Dayton, Elyria, New Lexington, Oxford and Salem. The new Akron plant was placed in operation several weeks before the end of the year 1928. These seven plants are designed to serve a total population of 621,400. Toledo has awarded contracts for a plant and construction will be started soon, the report points out. Columbus is preparing plans for sewage treatment improvements.

The marked improvement in operation of smaller treatment plants throughout the state is due to increased municipal funds for maintendance provided by sewer rental, supervision of operation of smaller plants by superintendents of a neighboring larger plant and the increased attention to this matter which is given by the State Department of Health, the report says.

The survey also points out that recent decisions of the Ohio Supreme Court in the Bucyrus and Delphos cases have awakened other municipalities to the necessity of proper sewage disposal.

Four villages and one city installed water softening plants during the past year making a total of 26 municipal plants now in service in Ohio, the report reveals. The new plants are at Crooksville, Gallipolis, Glouster, Marysville and St. Clairsville. The villages of Granville, New Bremen and Woodville have plants nearing completion. Other new softening plants are contemplated by a number of cities and villages.

—Dr. A. L. Stump of Derby has been appointed health commissioner of Pickaway County.

—The new health commissioner of the City of Ashland is Dr. C. B. Meuser, who succeeds Dr. E. L. Clem.

—Licking County commissioners have purchased a 90-acre farm four miles west of Newark, as a site for the 200,000 tuberculosis hospital authorized recently by the voters.

—Measures to prevent the spread of influenza adopted a year ago at a conference of health officials at Washington are now being felt in checking the disease on a wide scale, according to a recent announcement of Surgeon General Hugh S. Cumming. Reports from the various states show a substantial decrease in the number of influenza cases over a year ago, Dr. Cumming stated.

—Dr. Homer Austin, Columbus, for the past four years chief of the bureau of tuberculosis at the State Department of Health, has been appointed successor to the late Dr. Jackson A. Frank, chief of the division of hygiene. Dr. Alfred Lippert, Cincinnati, has been named chief of the division of child hygiene. He has been head of the bureau of health education.

—Dr. John L. Lavan, Kansas City, Mo., has been appointed health commissioner of Toledo succeeding Dr. Paul F. Orr, resigned. Dr. Lavan is a former major league baseball player, having been a member of the Kansas City and St. Louis National and American League teams.

—Use of metal polishes containing dangerous cyanides in all hotels, clubs, restaurants and other public eating places has been prohibited by an order issued by the New Jersey State Department of Health.

—Changes in some of the regulations of the Columbus Health Department have been announced by the City Board of Health. The plan of paying private physicians for handling charity cases has been abolished and the old plan of providing district physicians at a salary to care for indigents adopted. The Board also ablished medical examinations of food handlers and the fee for operation of bread and milk wagons. The fee for milk and meat permits was reduced from $2 to $1. Dr. N. C. Dysart, new city health commissioner, will continue to serve as epidemiologist along with his new duties, according to the announcement.

A report which shows the activities of the U. S. Public Health Service in preventing the introduction of diseases from abroad was recently forwarded to Congress by Surgeon General H. S. Cumming. This report indicates that no instance of the importation of any quarantinable disease occurred during the past fiscal year. No cases of plague, cholera, yellow fever or typhus fever arrived at quarantine stations in the United States. There were, however, ten instances during the year of bubonic plague occurring on vessels arriving at ports in foreign countries. The preventive measures applied by officers of the Public Health Service at foreign ports of departure are reflected in the small number of quarantinable diseases on vessels arriving at ports of the United States.

—The State Department of Health has announced that it has on hand a supply of pamphlets on "Smallpox and Chickenpox—the Differential Diagnosis" by Dr. Frank W. Laidlow, state district health commissioner at Middletown, N. Y., for distribution to health commissioners in this state. Enough copies can be furnished each commissioner to supply physicians in his district, the Department announced.

—The New York State Department of Health has notified county boards of supervisors that "for reasons of public policy it has been decided that hereafter no grants of state aid under

the provisions of Article 11-B of the Public Health Law shall be made to any county for the purpose of subsidizing a project operated by a private agency."

—State Health Director Charles A. Neal has announced that the Commonwealth Fund has promised a substantial financial contribution to the establishment and maintenance of a nursing service in Fulton, Henry, Williams and Defiance Counties during the next two years. The nursing service will further public health work in connection with the 62-bed hospital which has just been completed at Wauseon, Fulton County, through funds furnished by the Commonwealth Fund. Dr. Neal announced that it is anticipated that after the establishment of these services the local counties will continue to operate them and that additional grants may be secured for other sections of the state not now provided with health nursing service There are now nine counties without such service, he said.

—In a circular distributed to the girls of the junior and senior high schools of the county, the Montgomery County Medical Society warns of the alarming increase in the tuberculosis death rate among girls. A survey made by the society in cooperation with the county health department and the health department of the City of Dayton shows that the rate for girls is 75 per cent higher than among boys and that the disease develops largely during high school age.

—One of the brightest pages in recent sanitary history is furnished by the large measure of control since 1925 of the pollution of Ohio River water supplies by phenol wastes from industries, according to a statement issued by the U. S. Public Health Service. What has been accomplished without coercive legislation but through cooperative effort of the federal and state governments and the industries concerned, "augurs well for the future solution of some of the larger problems of stream pollution now confronting the nation," the Service points out. Pollution of the Ohio River has been curbed to such an extent that the expectation that it will soon cease to be a major problem seems justified, it is stated.

—Sale of aspirin by grocers is illegal in the state of Iowa and may be sold only by shops having a registered pharmacist, according to a decision handed down by the Iowa Supreme Court.

—Study of the relation of good health to high scholarship among university students has been completed under the direction of the United States Public Health Service. Two groups were selected, one, below in academic standing, and, one, above. The same physicians examined both groups and the examinations were identical. No physical defects occurred with such frequency as to be significant, the report of the study revealed, but overweight and underweight were more predominant in the probation group, while faulty posture was very frequent among the deficient group. Overweight and underweight seemed adversely to affect the student's ability to learn. A large percentage of the deficient group was self-supporting. The control group, or efficient group, showed a high percentage of excessive smokers and a larger number of total abstainers from tobacco. The control group predominated significantly only in being partially self-supporting, and in not considering themselves in good health.

—Special mention of the meningitis epidemic recorded in Indianapolis is made in a recent bulletin of the Division of Communicable Diseases of the State Department of Health. It is pointed out that this disease of high mortality has been unusually prevalent in Ohio during the past year, although not now so active as during last winter and spring. A month by month comparison shows a well sustained above average incidence totaling 386 cases for the year 1929, a record which has been exceeded but once in the morbidity history of the State Department. In 1917 there were 641 cases.

Little influenza is noted throughout the state, only 75 cases being reported between December 15 and 31. Twenty-one cases of tularemia were reported during December against 10 for the same period in 1928. Smallpox shows some improvement, but still is high in incidence, the bulletin states.

It was announced that in the future case reports which are incomplete in any particular will be returned to local offices for correction.

—Dr. O. H. Thomas has been re-elected health commissioner of Sandusky County.

—Toledo Academy of Medicine has authorized the appointment of a committee to study the process of sewage disposal with a view of recommending the best plan to city officials who are about to award a contract for a new sewage treatment plant. Those named on the committee were: Drs. C. W. Waggoner, Charles Lukens, C. D. Selby and John F. Wright.

—Dr. D. W. Fellers, Bloomville, has been elected chairman of the Seneca County Board of Health.

—The Central District Health Commissioners' Association elected the following officers at a recent meeting held at the Neil House, Columbus: President, Dr. H. G. Southard, Marysville; vice president, Dr. Newman Sifritt, Marion, and secretary, Dr. James F. Wilson, Washington C. H.

—Dr. J. R. Bolles, Napoleon, has been appointed Henry County health commissioner and Miss Martha Reiter has been employed as county nurse.

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HOSPITAL NOTES

—Miss Laura and Blanche Lange and Mrs. E. O. Fitch have endowed two beds for $5000 each at the Cincinnati Children's Hosiptal.

—At a joint meeting of the staffs of all Cincinnati Hospitals, some of the newest methods of treating asthma were discussed by Dr. Burton Haseltine, Chicago; Dr. Alvin La Forge, Chicago, and Dr. Dean Meyers, Ann Arbor, Michigan.

—C. A. Sharkey has assumed his duties as superintendent of the Barberton Citizens' Hospital. Mr. Sharkey was formerly credit manager and welfare officer at the Hamot Hospital, Erie, Pennsylvania.

—The Crestline Emergency Hospital, after undergoing extensive alterations, has been opened to the public. Improvements to the building amounted to approximately 10,000.

—Ground has been broken for the huge drainage sewers for the new Dayton $2,000,000 Good Samaritan Hospital. Work on the hospital building is expected to be started in February.

—Imperative need of a contagious disease hospital in Montgomery County has been pointed out by Dr. H. H. Pansing, county health commissioner.

—The new Circleville City Hospital will be completed about February 1, the contractors have announced.

—Physicians of Lawrence County have started a move to have the name of the Deaconess Hospital at Ironton changed and have suggested that some arrangement be worked out whereby the county and city may both contribute to its upkeep. Drs. Ralph Massie, W. F. Marting and Casper Burton have been named as a committee to confer with the hospital board on the questions.

—Two $1,000 legacies from the estate of Sidney Stead has been paid the Fort Hamilton Hospital and to Mercy Hospital at Hamilton.

—Ground has been broken for an addition to the Hannah E. Mullins nurses' home at the Salem City Hospital. The enlargement will provide living quarters for 18 more nurses. The building is now housing 23 nurses.

—Dr. A. E. Weinstein has been elected chief of staff of the Ohio Valley Hospital at Steubenville. Dr. I. C. Foster was named vice chief and Dr. C. S. McCullough secretary-treasurer. New directors are Drs. J. R. Caldwell, Carl Goehring, S. J. Podlewski and Caesar W. Sunseri.

—Tentative plans for the erection of a new county hospital at Ravenna have been drafted and an architect employed to submit drawings.

—Cleveland city officials are endeavoring to find some solution for the problem of how to care for downtown emergency cases after Lakeside Hospital is moved to its new building near Western Reserve University. Efforts are being made to have the city council authorize bonds to provide funds for erection of an emergency city hospital in the business district.

—Plans for the new Glenville Hospital, Cuyahoga County, made public by Dr. H. L. Taylor, chairman of the building committee, reveal that approximately $500,000 will be needed to build and equip the hospital. The proposed structure will have a capacity of 118 beds. Other physicians on the building committee are Drs. J. E. Tuckerman, W. H. Phillips, C. D. Waltz and M. L. Allen.

—Twenty-four medical graduates have been awarded internships at the Cincinnati General Hospital. They are: Sander Cohen, Richard W. Cragg, Ernest Ekermeyer, Harry L. Fry, Richard C. Hiestand, Thomas F. Humphrey, John E. Price, William Schmidt, Gene M. Stevenson, K. Leslie Stout, John L. Walker and Ashton L. Walsh, all of the University of Cincinnati, and Edward Alberts, Nebraska; J. G. E. Barhan, Tulane; Spencer Braden, Michigan; C. A. Calhoun, Texas; J. W. Cummins, Tulane; Dorothy E. Donley, Vanderbilt; William M. Gannon, Virginia; C. E. Richards and Thomas L. Ross, Jr., Emery; Richard K. Schmitt, Chicago; August Y. Wilcox, Jr., Pennsylvania, and William G. Workman, Ohio State.

—Rev. A. G. Lohmann, superintendent of Deaconess Hospital, Cincinnati, has announced that the use of nitro cellulose *X*-ray film has been discontinued at that institution and that acetate film is now being used exclusively.

—Dr. D. F. Russell has been named senior surgeon of the Van Wert County Hospital.

—The Detwiler Memorial Hospital, Wauseon, was dedicated with appropriate exercises on January 8.

—The following members of the faculty of the University of Cincinnati, College of Medicine, have been appointed to head departments in the Cincinnati General Hospital and the Tuberculosis Sanatorium by the Board of Directors of the University:

Dr. Roger S. Morris, medical; Dr. H. K. Dunham, tuberculosis attending staff; Dr. Alfred Friedlander, tuberculosis consulting staff; Dr. George J. Heur, surgical; Dr. A. Graeme Mitchell, pediatric; Dr. Henry L. Woodward, obstetrical; Dr. Charles L. Bonifield, gynecological; Dr. Charles E. Kiely, neuro-psychiatric, pro tem; Dr. Albert H. Freiberg, orthopedic surgical; Dr. Walter E. Murphy, otological; Dr. Samuel Ig-

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lauer, laryngological; Dr. Victor Ray, Sr., ophthalmological; Dr. E. O. Smith, urological; Dr. Elmore B. Tauber, dermatological; Dr. Sidney Lange, radiological; Dr. R. S. Austin, pathological; Dr. William B. Wherry, bacteriological; Dr. Albert P. Mathews, biochemistry; Dr. John P. Becker, dental, and Dr. Julien E. Benjamin, outpatient dispensary.

—A sum of $1500 has been given to the endowment fund of the Hillsboro Hospital by Lyman Beecher, Norman Beecher and Mrs. Georgianna Allen.

—Miss Bertha Willoughby has resigned as supervisor of the Gates Hospital for Crippled Children and has been succeeded by Miss Frances Robbins of Dayton, a graduate of the Battle Creek School of Nursing.

—Two Dayton hospitals were named beneficiaries in the will of the late Dr. Howard Lyons, Miamisburg. Miami Valley and St. Elizabeth Hospitals will each receive $5000 under the terms of the will.

—The new $2,000,000 Toledo hospital was opened January 4 with a public reception. A reception for members of the Northwestern Ohio medical profession was held on the evening of January 3. The following Toledo physicians have been appointed to the staff of the new institution:

Drs. M. B. Ajemian, A. T. Barnum, L. A. Brewer, N. W. Brown, T. H. Brown, H. J. Bollinger, N. T. Barnes, C. H. Bayha, O. W. Bond, J. F. Beerman, R. E. Boice, A. A. Brindley, P. B. Brockway, L. N. Bates, George A. Boone, George W. Butz, W. J. Coulter, Burt Chollett, B. H. Carroll, F. W. Clement, H. W. Dachtler, R. P. Daniells, J. R. Davis, B. S. Dunham, G. W. Dunlap, T. W. Durbin, F. M. Douglass, R. H. Elrod, D. A. Elwell, F. L. Eyestone, O. O. Fordyce, K. D. Figley, Norman K. Foley, H. R. Francis, E. G. Galbraith, W. G. Gardiner, L. C. Grosh, M. E. Goodrich, R. A. Gilreath, Lewis Ginsburg, P. P. Gintzel, S. D. Giffen, T. H. Hubbard, J. W. Hull, M. D. Haag, H. H. Harpst, H. H. Heath, B. J. Hein, Howard Holmes, Paul Holmes, E. W. Huffer, L. E. Hackbarth, W. G. Hartnett, Christel Hiss, H. F. Howe, A. B. Johnson, A. P. R. James, C. F. Jackson, John Keller, T. C. Kiess, J. Lester Kobacker, O. W. Kimbell, L. A. Levison, W. L. Lathrop, M. R. Lorenzen, W. R. Latchaw.

Drs. E. I. McKesson, L. A. Miller, J. A. H. Magoun, H. B. Meader, D. C. Mebane, E. C. Mohr, P. H. Moore, F. W. Morley, N. B. Muhme, O. K. Muhme, C. S. Mundy, Foster Myers, E. R. Marker, K. C. McCarthy, Dr. J. P. McLachlin, M. B. McGonigle, L. D. Miller, H. W. Nelles, P. F. Orr, H. S. Pamment, G. P. Parisen, H. J. Parkhurst, S. H. Patterson, L. E. Payne, C. E. Price, O. C. Rees, G. H. Reams, Kinsley Renshaw, W. H. Rheinfrank D. D. Robinson, Otto Sasse, C. C. Sherwood, H. E. Smead, L. F. Smead, Walter Snyder, Bernhard Steinberg, A. L. Steinfeld, J. L. Stifel, J. D. Sullivan, H. H. Stevens, R. W. Stewart, H. M. Scott, M. A. Strawbridge, T. A. Simons, Arthur N. Smith, James H. Smith, J. P. Spooner, Wade Stone, C. F. Tenney, R. B. Tucker, John F. Vick, H. L. Wenner, Dale Wilson, I. B. Winger, E. F. Ward, H. W. Williamson, G. E. Wright, Gaylord Willett, C. J. Yeisley, Samuel D. Zuker, Theo. Zbinden.

Dr. Florence Rena Sabin, fellow of Johns Hopkins University and a member of the staff of the Rockefeller Institute of Medical Research, has been given the Achievement Award of $5000, offered annually by the Pictorial Review to the American woman making the most distinctive contribution of the preceding year to the fields of American art, science or letters.

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News Notes From County Societies and Academies

First District

ACADEMY OF MEDICINE OF CINCINNATI
(Edward King, M.D., Secretary)

January 13—Regular meeting of the Academy at the Chamber of Commerce. Program: "The Rapid Heart," by Dr. Clifford Straehley.

Darke County Medical Society met Thursday afternoon, December 12 at the county health offices in Greenville. Dr. Rudolph Ruedemann, Dayton, gave an illustrated talk upon "Common Skin Diseases." News clipping.

Greene County Medical Society held its regular monthly meeting at the Iron Lantern, Xenia, Thursday morning, January 2. "Diseases of the Biliary Tract" was the subject of a talk by Dr. R. C. Austin, of Dayton. Preceding the address, Dr. H. C. Messenger, president of the society, appointed Drs. T. F. Myler and R. H. Grube of Xenia, Dr. P. B. Wingfield of Yellow Springs, Dr. A. N. Vandeman of Spring Valley, and Dr. A. R. Foster of Xenia, who is connected with state veterinary work, to serve on the new milk commission. At the close of the meeting, a luncheon was served at the Lantern.—News clipping.

Miami County Medical Society with the Shelby County Society as guests held the semi-annual joint luncheon session at the Favorite Hotel in Piqua January 3. The meeting was given as a surprise testimonial dinner to the oldest active practitioner of the Miami County Society, Dr. A. B. Frame of Piqua, who was 90 years old Saturday, January 4 . One of the largest joint sessions in history of the two societies, in the point of numbers, greeted the venerable Doctor who has practiced medicine 64 years. The presidents of the two societies, Dr. J. E. Murray of Piqua, and Dr. M. F. Hussey of Sidney, introduced the various speakers all of whom had been in active practice over 40 years.

Some very complimentary tributes were paid to Dr. Frame and his long period of service. It was pointed out by one of the speakers that the Doctor was a Captain in the Civil War and since has been elected Commander of the Legion of Honor. A beautiful desk set fittingly engraved was presented by the Miami County Society. The dinner was closed by all members of the two societies singing the beautiful parting song "Auld Lang Sang."—G. A. Woodhouse, Correspondent.

Montgomery County Medical Society held its regular meeting on Friday evening, January 3, in the Fidelity Medical Building auditorium. The program consisted of a symposium on "The Biliary Tract," as follows: 1, New Ideas of Physiology and Chemistry, Dr. F. L. Shively; 2, Clinical Aspects of Jaundice, Dr. Robert C. Austin; 3, Differential Diagnosis, Dr. A. B. Brower; 4, The Role of Cholecystography, Dr. Harry W. Burnett; 5, The Present Status of Medical Therapy, Dr. C. R. Weis; 6, Surgical Indications and Procedures, Dr. E. R. Arn.

On Friday evening, January 17, the Society held a dinner meeting at the Miami Hotel. The program was given by Dr. J. B. Carnett, Professor of Surgery, Graduate School of Medicine of the University of Pennsylvania. His subject was "The Simulation of Appendicitis and other Abdominal Affections by Intercostal Neuralgia of the Anterior Abdominal Wall." On Saturday morning, a dry clinic was held at St. Elizabeth Hospital, at which time Dr. Carnett demonstrated his special tests.—**Program.**

Fourth District

TOLEDO ACADEMY OF MEDICINE
(A. P. Hancuff, M.D., Secretary)

January 3—Annual dinner meeting of the Academy, held at the French Room of the Lasalle and Koch Co. Annual reports were presented as follows: Auditing, Legislative, Education, Library Board, Board of Trustees, Treasurer, Secretary. Annual address of the retiring president, Dr. T. H. Brown. The following officers were installed for 1930: President, Dr. B. J. Hein;

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District No. 12—398 N. Garfield Ave., Columbus, Ohio. Phone: Franklin 1234
District No. 15—Portsmouth General Hospital, Portsmouth, Ohio. Phone: 559

president-elect, Dr. B. G. Chollett; secretary, Dr. A. P. Hancuff; treasurer, Dr. W. W. Beck (re-elected). Councilors, Dr. H. B. Meader, three-year term; Dr. H. E. Smead, two-year term, and Dr. T. L. Ramsey, one-year term. Delegates to state meeting, Drs. E. G. Galbraith and E. J. McCormick, with Drs. M. W. Diethelm and P. M. Holmes, as alternates.

January 10—Section of Pathology, Experimental Medicine and Bacteriology. Program: on Roentgen Sickness," by Drs. J. T. Murphy, Ralph Deming, Murray E. Goodrich, A. J. Hartman, and Mr. H. W. Dachtler.

January 17—Medical Section. Program: "The Effect of the Public Health Programs Upon the Interests of the Private Physician," by Dr. D. J. Slosser, Defiance, Councilor of the Fourth District of the State Association; "Duodenal Ileus," by Dr. H. F. Howe; "Some Considerations in the *X*-Ray Diagnosis of Gall-Bladder Disease," by Dr. Murray E. Goodrich.

January 24—Surgical Section. Program: "Right Sided Abdominal Pain," by Dr. E. Benjamin Gillette.

January 31—Eye, Ear, Nose and Throat Section. Program: "Recent Developments in Cataract Operations," by Dr. W. H. Snyder; "Current Ideas of Glaucoma," by Dr. R. E. Boice; "Present Status of Treatment of Eye Infections," by Dr. A. L. Steinfeld. Bulletin.

Putnam County Medical Society held its last meeting of the year on Thursday evening, December 12, at the Methodist Church, Ottawa, with wives of members as guests. Following a turkey dinner, and a most enjoyable musical program, a short business session was held. Officers re-elected for 1930 are: President, Dr. J. R. Echelbarger; vice president, Dr. H. H. Sink, and secretary-treasurer, Dr. W. B. Recker. News clipping.

Fifth District

Academy of Medicine of Cleveland and the Cuyahoga County Medical Society

(Claude D. Waltz, M.D., Secretary)

January 3—Clinical and Pathological Section. Program: Presentation of the following: Neurological Cases, by Dr. L. J. Karnosh; Medical Cases, by Dr. Harold Feil; Surgical Cases, by Dr. F. C. Herrick; Dermatological Cases, by Dr. H. N. Cole; "Hypertension—Clinical and Pathological Aspects," by Dr. R. W. Scott.

January 10—Experimental Medicine Section. "Cebocephaly and Cyclopia (by invitation), Dr. T. T. Zuck; "Bone Healing after Amputation," by Dr. C. G. Barber; "The Influence of Soda and Peppermint on Gastric Motility" (by invitation), W. M. Kuenzel, A.M.; "The Age Incidence of Scapular Types" (by invitation), Dr. W. W. Graves; "Registration of Difficult Development in Childhood," by Dr. T. Wingate Todd.

January 15—Industrial Medicine and Orthopedic Section. "Local Analgesia in the Reduction of Fractures and Dislocations," by Dr. S. L. Robbins; Presentation of Motion Pictures from L. Bohler's Fracture Clinic of Vienna.

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January 17—Regular Academy Meeting. Special Program: "Examinations of the Apparently Well—Urological Aspects," by Dr. Edward Cathcart, Rochester, Minn.; "Rectal Aspects," Dr. C. C. Perry; "Clinical Demonstration of Complete Physical Examination," Dr. M. A. Blankenhorn.

January 24—Ophthalmological and Otolaryngological Section. Symposium on Sinus Disease: Sinus Diseases in Children, by Dr. H. J. Gerstenberger; discussion by Dr. W. C. Fargo; Acute Sinus Diseases in Adults, by Dr. C. E. Pitkin, discussion opened by Dr. J. M. Waugh; Chronic Sinus Diseases in Adults, by Dr. Wm. V. Mullin, discussion opened by M. T. Metzenbaum; *X*-Ray of Sinuses, by Dr. Fred Bettleheim, discussion by Dr. Herbert Mahrer.—Bulletin.

Ashtabula County Medical Society held its regular meeting, Tuesday evening, January 7 in the Medical Building, Ashtabula. A very interesting paper on "Eclampsia" was presented by Dr. R. L. Reycraft, of Cleveland, which was followed by a general discussion.—William Millberg, Secretary.

Geauga County Medical Society closed its year's work on December 4 with election of officers and our annual banquet, at which wives and friends were guests. Stunts taking the place of after-dinner speeches revealed a diversity of talents.

The Society held six meetings in 1929, and with the exception of the May meeting, all were held at the home of our esteemed member, Dr. Frank S. Pomeroy in Chardon. Dr. Pomeroy has steadily improved from a rather severe illness last April, and our meetings with him have been a real pleasure to ourselves as well as to Dr. Pomeroy. Among our speakers during the year were Dr. R. D. Leas of St. Lukes Hospital, Cleveland, who spoke on "Coronary Disease and Angina Pectoris"; Dr. M. A. Blankenhorn, Cleveland, who discussed "Oxygen Therapy," and Dr. C. W. Glover, Cleveland, who talked on "Treatment of Burns by Modern Methods." At the other three meetings, interesting cases were reported by members, followed by a general discussion which brought out many facts of interest. Our Society was well represented at both the State and the Fifth District meetings, which proves that we make up in interest what we may lack in numbers, and State dues were paid in October by nearly all of the members.—Isa Teed-Cramton, Secretary.

Lorain County Medical Society held its regular meeting on Tuesday January 14, at Lorain Hotel, Lorain, commencing with a five o'clock dinner. The following program was presented: "Periodic Health Examination," by Dr. H. C. King, Lakewood; discussants, Drs. John P. Rankin, Elyria, and E. V. Hug, Lorain.—Program.

Medina County Medical Society met Thursday afternoon, December 12, at the Evanon, south of Medina. Dr. D. W. Stevenson, of Akron, Coun-

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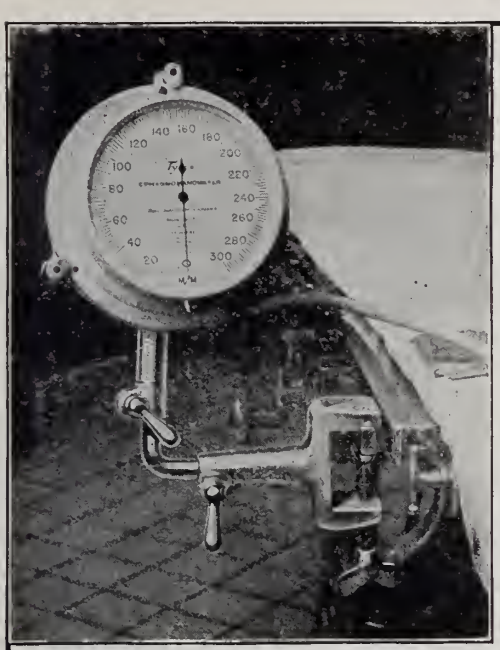
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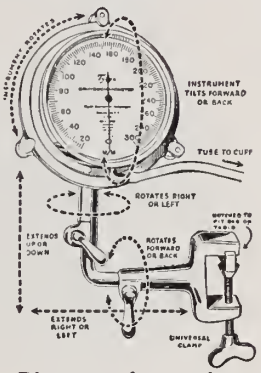


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cilor of the Sixth District, as principal speaker, gave a very interesting and instructive talk on common conditions of the nose, throat and ear, showing diagnosis and indicating treatment by the use of fixed sections and bone dissection models. Annual election of officers resulted as follows: President, Dr. M. F. Miller, Wadsworth; secretary-treasurer, Dr. J. K. Durling, Wadsworth (re-elected); legislative and medical defense committeeman, Dr. E. L. Crum, Lodi; delegate to State Meeting, Dr. Crum, and alternate, Dr. R. L. Mansell, Medina.—James K. Durling, Secretary.

Trumbull County Medical Society held its annual meeting at the Trumbull Country Club, Warren, on Thursday, January 16. Following an informal dinner at 6 p. m., annual reports of officers were presented. A paper on "The Psychic Factor in Diagnosis and Treatment of Disease as Concerns the General Practitioner," was presented by Dr. Willard C. Stoner, of Cleveland, and Dr. J. J. Thomas, also of Cleveland, discussed "To Whom Does the Priority Belong for the Discoveries of the Etiology of Puerperal Fever?"—Program.

Sixth District

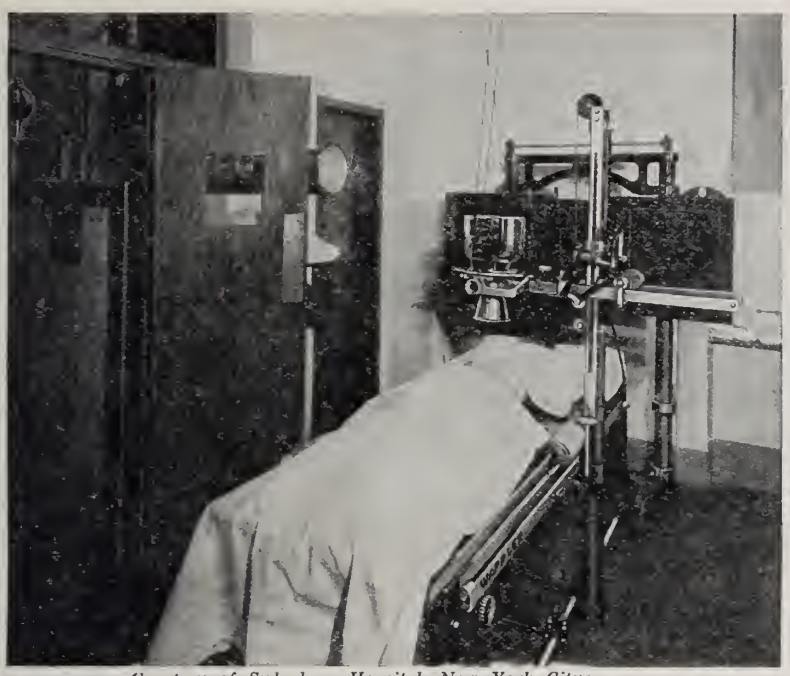
Mahoning County Medical Society met at the Youngstown Club, Youngstown, on Tuesday evening, January 14 for its regular monthly meeting. Dr. Albernon B. Reese, of New York gave an illustrated lecture on "Tumors of the Eye and Its Adnexa," and Mr. Burchell, of New York Eye and Ear Infirmary, presented with lantern slides, "The Anatomy and Abnormalities of the Temporal Bone." At the close of the program, a buffet lunch was served.—Program.

Portage County Medical Society held its regular meeting at the Nurses Home, Portage County Hospital, Ravenna on Thursday evening, January 2, with a large attendance of doctors and their wives. Following a supper, Dr. E. B. Dyson, Akron, spoke on "The Relation of the Human Constitution to Disease," and Dr. C. E. Held, also of Akron, discussed "Coronary Thrombosis." Plans for a proposed new hospital building on site recently offered for this purpose, were exhibited and explained. Members of the Society presented a fine fitted traveling case to their secretary, in appreciation of services during a number of years.—E. J. Widdecombe, Secretary.

Richland County Medical Society held its annual dinner and business meeting at the Mansfield-Leland Hotel, Mansfield, on Thursday evening, December 26. The following officers were elected: President, Dr. Leopold Adams; vice president, Dr. C. R. Damron; secretary-treasurer, Dr. D. C. Lavender; legislative committeeman, Dr. S. C. Schiller; medical defense, Dr. C. R. Keller; delegate to State Meeting, Dr. George Smith; alternate, Dr. Charles Brown. "Phases of Industrial Commission Work" was the subject of a talk by Dr. H. H. Dorr, Columbus, chief medical examiner of the Ohio Industrial Commission. Members of the local Welfare Department were guests at the meeting.—News clipping.

Summit County Medical Society met at the Akron City Club on Tuesday evening, January 2 for its annual meeting. The program, "The Progress of 1929" was presented as follows: Eye, Ear, Nose and Throat, by Dr. M. J. Pierson; Pathology, Dr. T. H. Boughton; Roentgenology, Dr. J. H. Selby; Surgery, Dr. G. R. Taylor; Medicine, Dr. A. P. Ormond. The following officers were installed for 1930: President, Dr. R. E. Amos; president-elect, Dr. C. C. Pinkerton; secretary-treasurer (re-elected), Dr. A. S. McCormick; delegates to State Meeting, Drs. H. S. Davidson, C. R. Steinke, and W. A. Hoyt.—Program.

The Union Medical Association of the Sixth Councilor District held its two hundred and sixteenth session at the Canton Women's Club, Canton, on Wednesday, January 8. A paper on "Eye and Ear Injuries from the Standpoint of the Practitioner, the Employer and the State Industrial Commission" was presented by Dr. M. E. Scott, of Massillon at the morning session. A business session followed a noon luncheon, and scientific papers were presented by Dr. William H. Skipp of Youngstown and Dr. V. A. Dodd, Professor of Surgery, Ohio State University College of Medicine, Columbus. Dr. Skipp spoke on "Pre and Post Operative Treatment of





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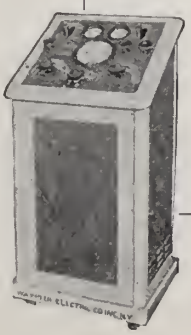
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Exophthalmic Goiter," and Dr. Dodd discussed "Some Considerations in the Treatment of Fractures."

Seventh District

Belmont County Medical Society held a joint meeting with the Belmont County Dental Society on Thursday afternoon, December 12, at Kilkenny Inn, Bellaire. E. C. Armbrecht, D.D.S., of Wheeling, gave an illustrated talk on "Oral Surgery." At a short business session of the Medical Society, the following officers were elected for 1930: President, Dr. C. J. Holley, Bridgeport; vice president, Dr. A. T. Hopwood, Holloway; secretary-treasurer, Dr. C. W. Kirkland (re-elected), Bellaire; legislative committeeman, Dr. R. H. Wilson, Martins Ferry; medical defense committeeman, Dr. D. O. Sheppard, Barnesville; censors, Drs. D. O. Sheppard, J. O. Howells and Charles Wassman; delegate to State Meeting, Dr. E. C. Cope, Barton, with Dr. Kirkland as alternate.—News clipping.

Columbiana County Medical Society held its annual meeting on Tuesday evening, December 17 at the Traveler's Hotel, East Liverpool. Following a dinner, Dr. C. W. W. Elkin, of Pittsburgh, addressed the society on "Carcinoma of the Gastro-Intestinal Tract from the Standpoint of Early Diagnosis." Annual election of officers resulted as follows: President, Dr. R. T. Holzbach, Salem; vice president, Dr. Edward Miskall, East Liverpool; secretary-treasurer, Dr. T. T. Church (re-elected), Salem; delegate to State Meeting, Dr. J. A. Fraser, East Liverpool, and alternate, Dr. L. W. King, Salem. Committee appointments were: Legislative, Dr. D. H. Beaumont, Wellsville and Dr. F. R. Crowgey, Salem; medical defense, Dr. Harry Bookwalter, Columbiana; censors, Dr. P. C. Hartford, East Palestine; Dr. Guy E. Byers, Salem, and Dr. Seward Harris of Lisbon.—News clipping.

Eighth District

Athens County Medical Society met Monday, January 6 in Nelsonville. Luncheon was served by the ladies of the Presbyterian Church. Dr. Frank W. Harrah, of Columbus, spoke on "Urology" and Dr. Charles McGavran, of Columbus, gave an address on "Diabetes Mellitus." Both papers were appreciated by the 25 physicians present.—A. L. Pritchard, correspondent.

Meigs County Medical Society met Thursday evening, December 5 as the guest of Dr. J. N. Gilliford in her office at Pomeroy. At the business session, the following officers were elected for 1930: President, Dr. P. A. Jividen, Rutland; secretary-treasurer, Dr. Byron Bing, Pomeroy.

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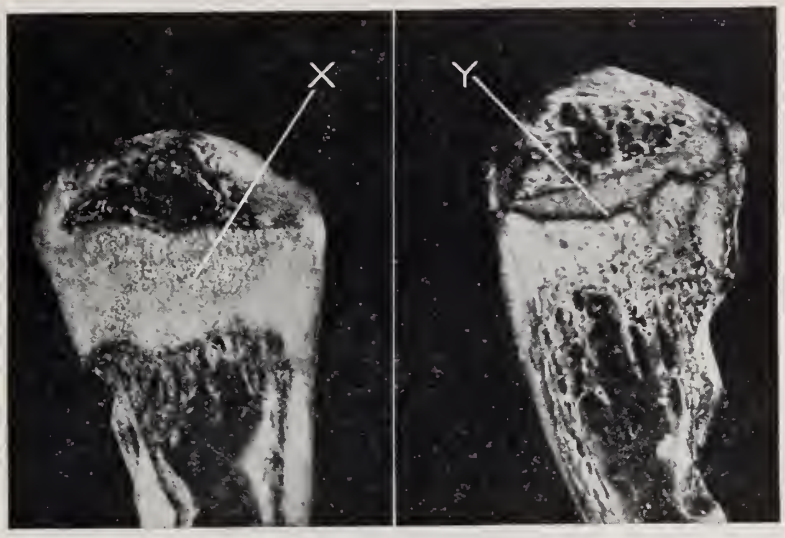
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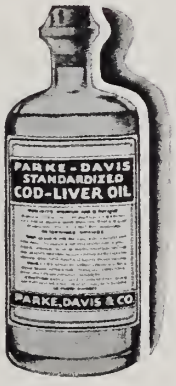
Illustrating "Line Test" method of standardizing Vitamin D content. At left, the leg bone of a rachitic rat showing induced decalcification area (X). At right, healing has begun, as evidenced by initiation of recalcification at dark line (Y).

HOW can vitamins be "measured?" What is meant by "standardized" when applied to Cod-liver Oil? Here, briefly, is the method followed in determining the vitamin content of Parke-Davis Standardized Cod-liver Oil:

To test for *vitamin A potency* the oil is given orally to young albino rats which have been fed on a diet free from vitamin A. We ascertain how much oil is needed daily to correct the induced typical eye condition (xerophthalmia) and to institute a specified rate of growth. The daily minimum amount of oil required to bring about this change constitutes one vitamin A unit.

Every lot of Parke-Davis Standardized Cod-liver Oil must contain not less than 13,500 units of vitamin A in each fluid ounce.

In determining *vitamin D potency* we use our quantitative adaptation of the "line test" technique of McCollum, Simmonds, Shipley, and Park. The oil is fed to young rats in which rickets has been induced. We measure the minimum amount of oil required per day over a period of ten days to initiate recalcification in the leg bones. This amount represents one vitamin D unit. Each fluid ounce of Parke-Davis Standardized Cod-liver Oil contains not less than 3000 vitamin D units.



Parke, Davis & Company was the first commercial laboratory to assay Cod-liver Oil for both vitamins A and D. Parke-Davis Standardized Cod-liver Oil is backed by years of research work in various phases of nutrition chemistry. Quite aside from its vitamin richness, this product has other distinguishing features which will appeal to you. It is clear, bland, and as nearly tasteless and odorless as a pure Cod-liver Oil can be. May we suggest that in prescribing Cod-liver Oil for your patients you specify the Parke-Davis product?

Send for stock package

To any physician who is personally unacquainted with Parke-Davis Standardized Cod-liver Oil we will gladly send a 4-ounce bottle for free trial.

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PARKE-DAVIS STANDARDIZED COD-LIVER OIL

A number of things of interest to the profession were talked over in an informal way. The next meeting will be entertained by Dr. L. G. Gribble, Pomeroy, on the first Thursday in February. After the meeting adjourned, a delicious lunch was served by the hostess, Dr. Gilliford, to the following members who were present: Drs. P. A. Jividen, John Philson, M. S. Daniels, C. A. Poindexter and Byron Bing.

Muskingum County Academy of Medicine held its regular meeting on Wednesday evening, January 8 in the American Legion rooms, Zanesville. The program was as follows: "Urology—Its Application to General Medicine," with lantern slides, by Dr. Frank W. Harrah, Columbus, and "Complications of Diabetes Mellitus," by Dr. Charles W. McGavran, of Columbus.—Program.

Perry County Medical Society met at the Park Hotel, New Lexington, Monday, December 18. Dr. R. W. Miller, of Hemlock, presented a paper on "Intestinal Obstruction." A short business session was held, with election of the following officers: President, Dr. R. W. Miller; vice president, Dr. C. B. McDougal; secretary-treasurer, Dr. F. J. Crosbie (re-elected); legislative committeeman, Dr. S. N. Ford; delegate to state meeting, Dr. C. B. McDougal, and alternate, Dr. E. D. Allen.—News clipping.

Washington County Medical Society held its annual meeting at Marietta Memorial Hospital on Wednesday evening, December 11. Members were given an opportunity to inspect the hospital plant, and a survey was made of the entire building. Superintendent Ira Dodge, gave an interesting description of the work done in the new hospital since it was opened in July. Election of officers for 1930 resulted as follows: President, Dr. J. B. Penrose; vice president, Dr. E. W. Hill, Sr.; secretary-treasurer, Dr. J. R. Warren.—News clipping.

Ninth District

Gallia County Medical Society met Thursday evening, December 12 at Holzer Hospital, Gallipolis for its annual meeting. Dr. O. A. Vornholt was re-elected as president and Dr. Milo Wilson was re-elected as secretary-treasurer. A paper on "Recent Advances in Medicine and Surgery" was presented by Dr. Vornholt. A general discussion on Undulant Fever was participated in by members present.—News clipping.

Scioto County—The regular meeting of the Hempstead Academy of Medicine was held on Monday evening, January 13 at the Nurses Home, Portsmouth. "Pyelitis of Pregnancy" was the subject of a paper presented by Dr. Frank Beeks, of Portsmouth, which was followed by a general discussion. A short business meeting followed the scientific program.—Program.



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Then the Patch plants reap their harvest of the vitamin A and D bearing livers.

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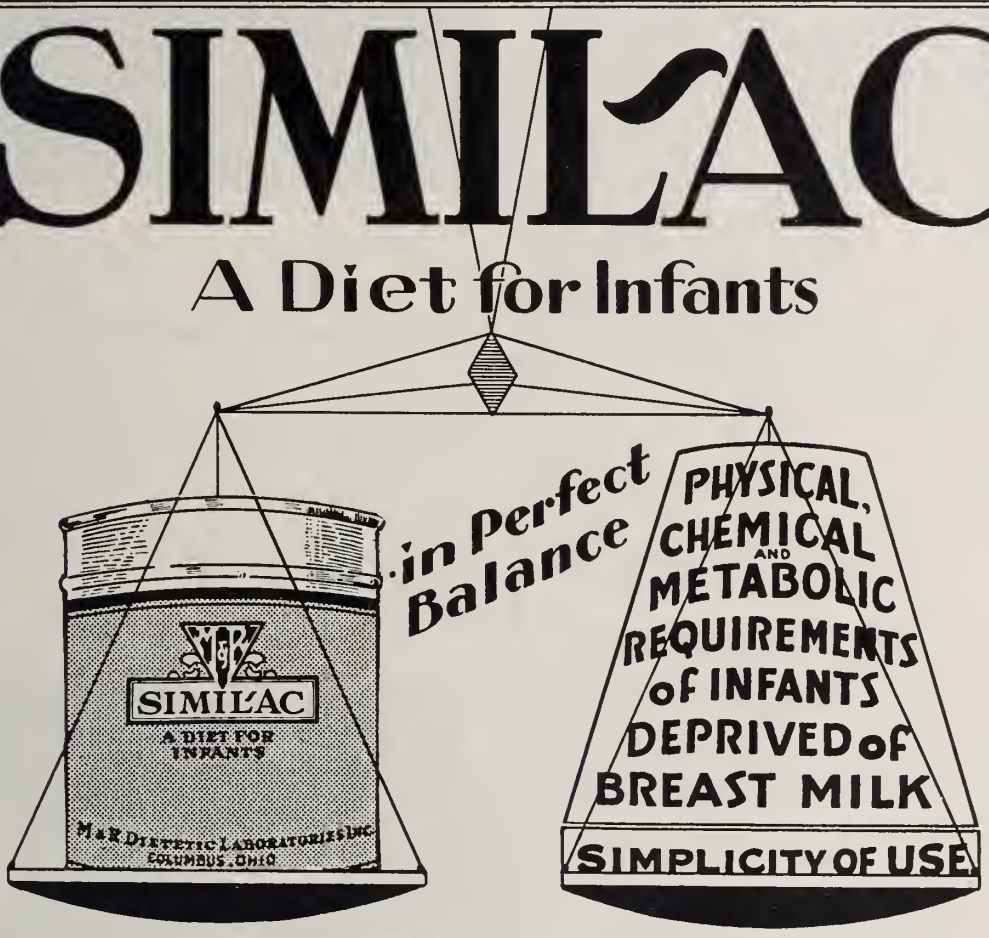
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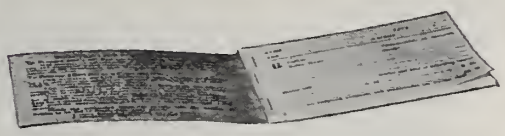
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COLUMBUS, OHIO

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Columbus)

January 6—Program: "Progress in Surgery in 1929," by Dr. Fred Fletcher. Annual reports of the Committees on Legislation. Program, Library and Health.

January 13—Program: "Diverticulum of the Esophagus," illustrated with lantern slides, by Dr. Andre Crotti. Discussion opened by Dr. C. F. Bowen and Dr. Hugh Beatty.—Program.

COUNTY SOCIETY ELECTIONS

Recent elections of county society officers for 1930, have been received from the following counties:

Allen—President, Alan Knisely; vice president, W. W. Beauchamp; secretary, James Halfhill; treasurer, T. T. Sidener; correspondent for *The Journal*, Burt Hibbard; legislative committeeman, R. A. Buchanan; medical defense committeeman, Edward B. Pedlow; delegate to state meeting, H. L. Basinger; alternate, Burt Hibbard.

Ashland—President, D. L. Mohn; vice president, G. B. Fuller; secretary-treasurer, and legislative committeeman, H. M. Gunn (re-elected); delegate to state meeting, G. B. Fuller; alternate, W. F. Emery.

Champaign—President, V. G. Wolfe; vice president, E. W. Ludlow; secretary-treasurer, L. A. Woodburn (re-elected); legislative committeeman and delegate to state meeting, Mark Houston; alternate, J. W. Norman.

Clark—President, H. A. McKnight; vice president, Wm. B. Quinn; secretary, I. H. Boesel (re-elected); treasurer, J. E. Burgman; legislative committeeman, R. R. Richison; medical defense committeeman, D. W. Hogue; delegate to state meeting, J. H. Poulton.

Clinton—President, T. E. Craig; vice president, V. E. Hutchens; secretary-treasurer, A. C. Roberts (re-elected); correspondent for *The Journal*, R. Conrad; legislative and medical defense committeeman and delegate to state meeting, E. Briggs; alternate, L. Fullerton.

Coshocton—President, F. M. Marshall; vice president, S. D. Cohen; secretary-treasurer, J. D. Lower (re-elected); legislative and medical defense committeeman and delegate to state meeting, D. M. Criswell; alternate, Dr. Cohen.

Defiance—President, J. J. Reynolds (re-elected); vice president and delegate to state meeting, George DeMuth; secretary-treasurer, D. J. Slosser (re-elected); legislative committeeman, John U. Fauster; alternate to state meeting, Dr. Reynolds.

Delaware—President, M. S. Cherington; vice president, D. S. James; secretary-treasurer, A. R. Callander (re-elected); correspondent for *The Journal*, F. M. Stratton; legislative committeeman, D. S. Cowles; medical defense committeeman, I. T. McCarty; delegate to state meeting, H. E. Caldwell; alternate, N. Gorsuch.

Columbus Academy of Medicine—President, Robert B. Drury; vice president, R. A. Ramsey; secretary-treasurer, James A. Beer; legislative committeeman, John M. Thomas; delegates to state meeting, I. B. Harris, E. J. Emerick, J. H. J. Upham, John B. Alcorn, J. B. Thomas.

Gallia—President, O. A. Vornholt (re-elected); vice president, Ella G. Lupton; secretary-treasurer and correspondent for *The Journal*, Milo



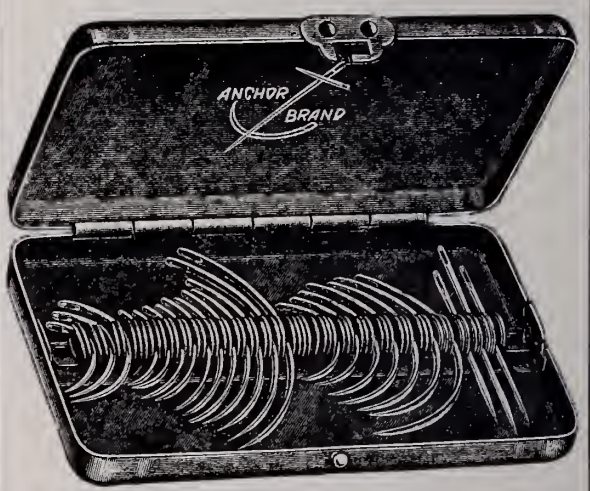
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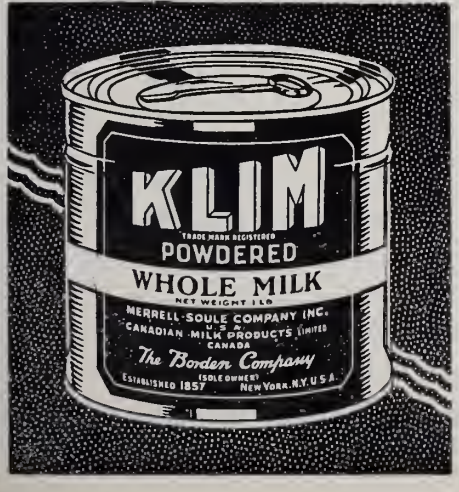
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Geauga—President, Clara J. Swan; vice president, Walter C. Cory; secretary-treasurer and correspondent for *The Journal*, Isa Teed-Cramton (re-elected); legislative committeeman, W. S. Hawn; medical defense committeeman and delegate to state meeting, C. F. Gilmore; alternate, Dr. Cory.

Hardin—President, N. C. Schroeder; vice president, Floyd M. Elliott; secretary-treasurer, W. N. Mundy (re-elected); legislative committeeman, W. A. Belt; medical defense committeeman, L. C. Neiswander; delegate to state meeting, G. S. Wilcox; alternate, J. F. Holtzmuller.

Harrison—President, J. M. Scott; secretary-treasurer, R. P. Rusk (re-elected); legislative and medical defense committeeman, W. S. Spence.

Jefferson—President, V. B. DiLoreto; vice president, I. A. Fine; secretary-treasurer and correspondent for *The Journal*, M. H. Rosenblum; legislative committeeman and delegate to state meeting; J. C. M. Floyd, medical defense committeeman, O. A. Lashley, alternate to state meeting, A. E. Weinstein.

Knox—President, W. H. Eastman; vice president, I. S. Workman; secretary-treasurer, Julius Shamansky (re-elected).

Licking—President, E. A. Moore; vice president, C. J. Dillon; secretary-treasurer, D. A. Skinner; legislative committeeman, W. E. Shrontz; delegate to state meeting, Dr. Moore; alternate, H. B. Anderson.

Madison—President and delegate to state meeting, R. H. Trimble; vice president and legislative committeeman, H. V. Christopher; secretary-treasurer, correspondent for *The Journal* and alternate to state meeting, H. P. Sparling; medical defense committeeman, F. E. Rosnagle.

Mahoning—President, H. J. Beard; vice president and correspondent for *The Journal*, A. W. Thomas; secretary, J. P. Harvey (re-elected); treasurer, W. X. Taylor (re-elected); legislative committeeman, C. B. Norris; delegate to state meeting, E. R. Thomas; alternates, M. E. Hayes and C. B. Norris.

Mercer—President, M. L. Downing; vice president, W. H. Thompson; secretary-treasurer, Frank E. Ayers (re-elected); censor, G. T. Willke; delegate to state meeting, L. M. Otis; alternate, R. E. Riley.

Ottawa—President, C. J. Yeisley; vice president, F. S. Heller; secretary-treasurer, E. D. Schuiteman; correspondent for *The Journal*, S. G. Sloan; legislative committeemen, R. A. Willett, C. J. Yeisley, H. J. Pool; medical defense committeemen, R. L. Waters, Dr. Heller and Dr. Schuiteman; delegate to state meeting, Dr. Pool; alternate, Dr. Heller.

Paulding—President, E. Kohn; vice president, J. R. Heath; secretary-treasurer, T. P. Fast; legislative committeeman, R. J. Dillery; medical defense committeemen, C. E. Huston, R. J. Dillery, K. C. Evans; delegate to state meeting, Dr. Fast; alternate, Dr. Huston.

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Concentrated ANTI-PNEUMOCOCCIC SERUM, Types I and II, SQUIBB is supplied in syringes, each containing one dose. 10,000 units each of Type I and Type II pneumococcic antibodies, as measured by the Felton method, are contained in each syringe.

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Wood—President, E. H. Mercer; vice president, W. H. Price; secretary-treasurer, F. V. Boyle; correspondent for *The Journal*, H. J. Powell; legislative committeeman, T. O. Whitacre; medical defense committeeman, Earl D. Foltz; delegate to state meeting, E. A. Powell; alternate, J. W. Rae.

New Ethical Code for Lawyers

New rules regulating the practice of law in Ohio have been promulgated by the Ohio Supreme Court, following recommendations by the Committee on Professional Ethics of the Ohio State Bar Association.

The rules as published in the Ohio Bar Association Report follow:

1. These rules of professional conduct shall be binding upon all members admitted to practice law in the State of Ohio, and the wilful breach thereof shall be punished by reprimand, by suspension or by disbarment, as may be determined by any court of competent jurisdiction. The Canons of Ethics of the American Bar Association are commended; and nothing in these rules is intended to limit or supercede any provisions of law relating to the duties and obligations of attorneys or the consequences of violations thereof.

2. An attorney-at-law shall not advertise or otherwise solicit professional employment. This rule shall not apply to the publication or use of ordinary professional cards or conventional listings in legal directories and newspapers.

3. An attorney-at-law shall not employ another to solicit or to obtain or remunerate another for soliciting or obtaining professional employment for him.

4. An attorney-at-law shall not acquire an interest adverse to a client in a subject matter concerning which the attorney has been employed.

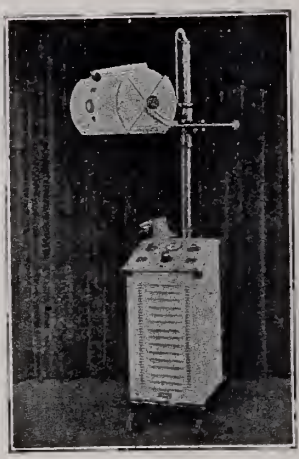
5. An attorney-at-law shall not, directly or indirectly, without the consent of his client, purchase property at a probate, foreclosure or judicial sale in an action or proceeding in which he appears as attorney for a party.

6. An attorney-at-law shall not represent conflicting interests except with the consent of all parties concerned.

7. An attorney-at-law shall not accept professional employment without first disclosing to his prospective client his relation, if any, with the adverse party, and his interest, if any, in the subject matter of the employment.

8. An attorney-at-law shall not accept employment adverse to a client or former client relating to a matter in reference to which he obtained confidential information by reason of and in the course of his employment by such client or former client.

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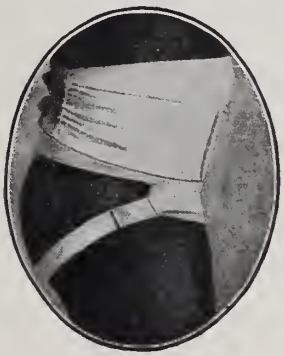
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"Parrot" Disease

Psittacosis, or "parrot disease" an infectious malady of tropical birds, is believed to have caused the death of one Ohioan and the serious illness of four others within the last two weeks.

A Toledo woman is suspected as having died as a result of the malady and her husband is said to be seriously ill from the same disease. The other three cases are reported among the members of a Warren family.

Press notices report six deaths and 20 ill from the disease in Germany, and one death and 11 ill at Baltimore, Maryland.

In each case reported, a parrot recently had been brought into the home and soon after its arrival had taken sick and died.

Psittacosis, according to Stedman's Medical Dictionary, is "an infectious disease of birds, especially parrots; characterized by diarrhea, loss of appetite, wasting and loss of feathers; sometimes transmitted to man in whom the symptoms are headache, nausea, epistaxis, constipation and fever preceded by a chill and usually with added symptoms of broncho-pneumonia."

Danger of an epidemic of "parrot disease" is slight, according to a statement issued by the U. S. Public Health Service, because of the fact that as far as is known the disease is spread only by contact with birds and is noncommunicable between human beings. The germ, the statement said, is believed to remain around the beak and mouth of the bird. The symptoms of the disease in man are said to be similar at first to those of typhoid fever.

No official statement on the Ohio cases had been issued by the Division of Communicable Diseases, State Department of Health, but officials are watching the developments. No official notice of the cases has been sent the State Department, because the disease, being so rare, is not listed as a reportable disease, state health officials said.

An outbreak of a strange malady which occurred several months ago in Buenos Aires, Argentine, and caused a score of deaths, was diagnosed after searching investigation as "parrot disease," press notices point out.

Some medical authorities disagree with the theory that the disease is transmitted from fowl to man, one publication stated, contending that the extremely high temperature of the body of a fowl would prevent the transmission of living bacteria.

Army officers who receive medical attention from civilian or private sources while on leave may not be reimbursed for the amount of money spent for such treatment, U. S. Comptroller General McCarl has ruled. Such treatment must be obtained at army medical posts, he rules.

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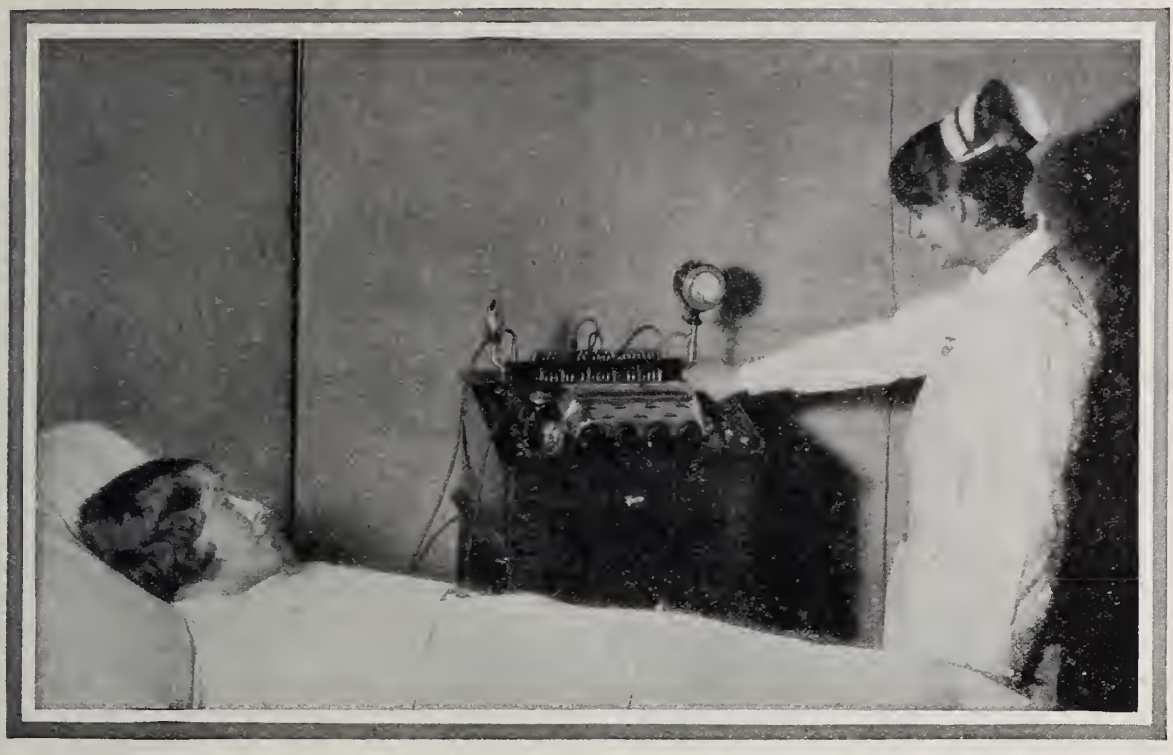
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A reprint in full of the article above quoted, also reprints of other articles on this subject, will be sent on request.

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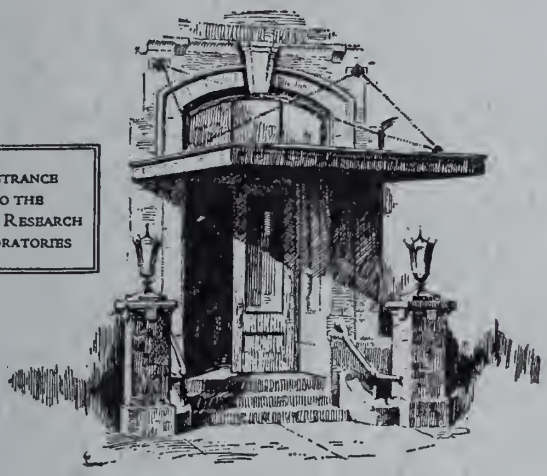
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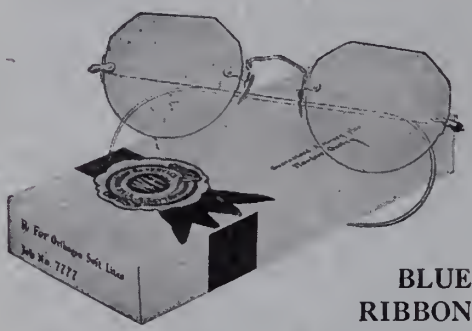
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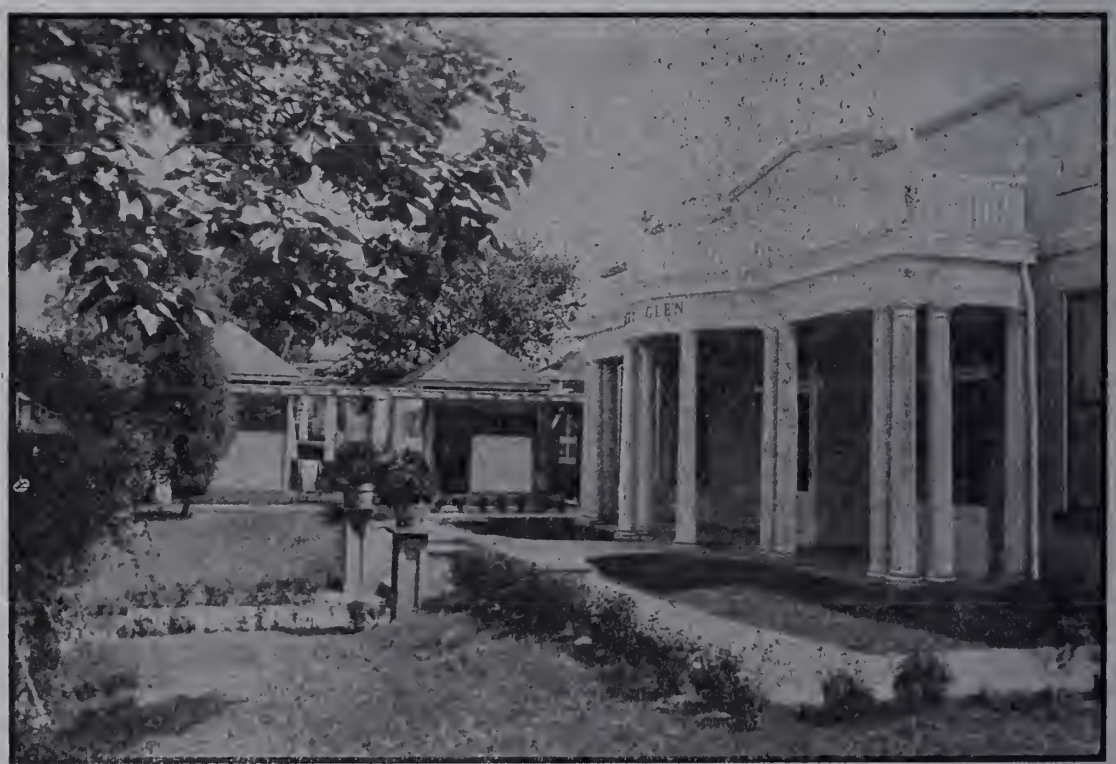
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Eighty-Fourth Annual Meeting, Columbus, May 13, 14, 15, 1930

THE N.Y. ACADEMY OF MEDICINE
MAR - 1 1930

The OHIO STATE MEDICAL JOURNAL

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THE OHIO STATE MEDICAL ASSOCIATION
AS A MEDIUM OF SERVICE TO ITS MEMBERS

MARCH 1, 1930 VOLUME XXVI
Number - - 3

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Comparative Analysis of S. M. A. and Breast Milk

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Ash	0.25-0.30%	0.215-0.226*
pH	6.8-7.0	6.97**
△	0.56-0.61	0.56***
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Specific Gravity	1.032	1.032
Caloric Value:		
– per 100 c. c.	68.0	68.0
– per ounce	20.0	20.0

* Average per cent according to Holt, "American Journal Diseases of Children," Vol. 10, page 239, 1915.

** Davidsohn, H.—Ueber die Reaktion der Frauenmilk, Zeitsch. for Kindern., Vol. 9, 1913, page 15.

*** Fridenthal, H.—Ueber die Eigenshaften kuenstlicher Milchsera und ueber die Herstellung eines kuenstlichen Menschenmilchersatzes. Zentralb. f. Physiol., Vol. 24, 1910, 687.

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Ohio State Medical Journal

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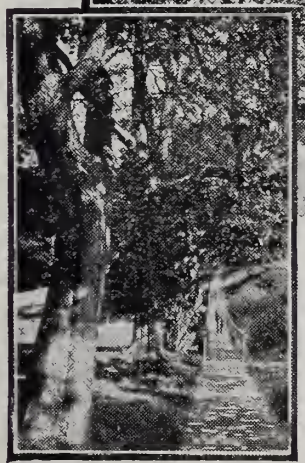
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PUBLIC HEALTH — SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Providing the weatherman comes to bat with a 1000 per cent brand of spring weather, present prospects are for a record-breaking attendance at all sessions of the Eighty-Fourth Annual Meeting of the Ohio State Medical Association to be held in Columbus, Tuesday, Wednesday and Thursday, May 13, 14 and 15.

Bright Prospects for Annual Meeting

Plans for the annual gathering are shaping up in fine style. Committees of the Columbus Academy of Medicine in charge of local arrangements have been steadily at work completing details for the meeting.

As previously announced, all sessions of the meeting will be held at the Neil House, which also will house the exhibits, located opposite the State House and in the heart of the downtown business and shopping district of Columbus.

A program of great merit and unusual interest has been arranged. This will be published in full in the April issue of *The Journal.*

Clinics and the tenth annual golf tournament staged by the Ohio State Medical Golf Association will unofficially open the Eighty-Fourth Annual Meeting on Monday, May 12. The Columbus committee on clinics is now completing plans for holding the demonstrations at the various Columbus hospitals and medical centers. Arrangements for the golf meet also are in progress. Complete details for these two attractions will be published in later issues of *The Journal.*

The annual meeting will open officially on Tuesday morning, May 13, with a general session, to be followed by the first session of the House of Delegates.

The scientific programs of the various sections —medical, surgical, eye, ear, nose and throat, obstetrics and pediatrics, public health and industrial medicine, and mental and nervous diseases—will get underway Tuesday afternoon. The first day's program will close in the evening with a general session at which the annual addresses of the President and President-elect will be delivered.

On Wednesday morning, May 14, the scientific sections will convene again and at noon the annual organization luncheon will be held for officers, councilors, presidents and secretaries of the county medical societies and academies, and the legislative and medical defense committeemen.

The final session of the House of Delegates will be held Wednesday afternoon immediately after the organization luncheon. The third general session of the three-days meeting will be held Wednesday afternoon after the final session of the House of Delegates. Another general session is scheduled for Wednesday evening. These general sessions will be addressed by speakers of state and national reputation, whose subjects will be of general as well as scientific interest.

The gathering will be closed Thursday morning with the final general scientific session under the joint auspices of the medical and surgical sections.

Fraternity and class reunions and luncheons will be held during the three-days meeting so that old friends and classmates can get together to talk over the "good old days."

Those who are planning to attend the Columbus meeting are again advised to make hotel arrangements at once. The Neil House will be the headquarters hotel and will undoubtedly attract large numbers of the delegates and visitors. A list of other Columbus hotels located conveniently to the Neil House is published elsewhere in this issue of *The Journal.*

Every member of the State Association who can arrange to be away from his practice on May 13, 14 and 15 is urged to attend this year's gathering for the purpose of adding to his scientific knowledge, hearing and discussing some of the many important and complex problems facing medical organization, listening to the views of colleagues on economic and scientific questions, and renewing old friendships.

In a recent address, discussing some of the economic and social factors in the field of life insurance, former President Coolidge pointed out some of the important underlying principles on which the government and political fabric of the nation were founded and in effect sounds the subtle warning that these must be maintained and followed to insure continued peace, happiness and prosperity.

Government and Individuals

"So far as we can discover from history, nations have grown up under the domination of two antagonistic theories," declared Mr. Coolidge. "Between them there has always been a struggle for existence. One has regarded the people

at large as subjects, incapable of self-support, self-direction and self-government so that they must remain under the dominion of some overlord for their own welfare and protection. * * * Our country was founded on the other theory which holds that the people are sovereign. While we know that it is vain to look for perfection in human affairs, we are convinced that the best possible government and the best possible economic system are those which the people provide for themselves. We believe that human progress will be greatest where an enlightened people make the law for their own protection and control the business for their own support. We have staked our institutions on the ability and character of the individual. We have recognized that he is endowed with every power and he must therefore assume every responsibility. This is the essence of popular sovereignty. The people are privileged to follow their own conscience, make their own decisions, make their own mistakes and reap their own rewards."

Some critical authorities have observed within recent years that to all appearances the rock-bottom principles referred to by Mr. Coolidge are often lost sight of in the present era of social and economic readjustments.

Clamor for more laws and more government is heard on all sides. Bureaus and boards are created in wholesale lots to take over on a state or nation-wide scale activities which were once the duties of local governments, civic agencies or left entirely in the hands of the individual. There has been a shift in emphasis from the principle of individual initiative and responsibility to the theory that it is the duty of the state to play the role of monarch in the social and economic life of the people.

The fundamentals of democracy are being severely strained by the selfish and organized demands and activities of those who are trying to inject socialistic ideas not only into government but into all other undertakings which affect the happiness and welfare of the public at large. The time has arrived for the American public to answer the question of how long America shall be able to "demonstrate the supreme power of a free and enlightened people".

Legislative Qualifications

Concerted effort is being put forth throughout the state by groups especially interested in the revision of the taxation system of Ohio, a question with which the next session of the Ohio General Assembly will wrestle, to have persons of high caliber elected to the next Legislature because of the great importance of the problems destined to confront that body in 1931.

As a resolution passed by one chamber of commerce on the question stated, "it is of the utmost importance that men of integrity, unbiased in their views and of the highest degree of ability should be elected to the state legislature at the next election".

The sentiment expressed in this and similar exhortations to the people to make the personnel of the 1931 General Assembly of the highest possible caliber is meritorius and it is to be hoped that this good advice will be heeded.

As a matter of fact it is vital that the careful selection of representatives to the state assembly be practiced at all times.

From the standpoint of public health it is important that only "men of integrity unbiased in their views and of the highest ability" be elected to public offices and it is equally important that those elected have the proper attitude toward public health problems and the proper medical viewpoint on matters pertaining to the art of healing and treatment of the sick and injured.

It is up to the medical profession to demand from the public, for the public's own good, that only those possessing honest motives, sincere respect for the welfare of the public and a willingness to listen to and heed the advice of medical leaders on matters of public health and medical practice be elected to the legislature and to all other public offices.

Now is not too early for the weeding out of the undesirables from the list of prospective candidates.

Science and Pseudo-Service

Weird claims of cultists, quacks and fake healers of all kinds are continually being exploited to the public and are often accompanied by caustic criticism of the medical profession for its "intolerance" in refusing to accept or see any merit in these worthless, and usually dangerous, methods of healing.

A portion of the public is confused by this apparent clash between two groups of individuals engaged in practicing the healing art and in some instances turns to the cultist or faker with evil results, because it does not measure the value of the method exploited by the yardstick of science.

Just how the public should analyze this question is explained by Chester Rowell, feature writer for the *San Francisco Chronicle*, in discussing an appeal for tolerance made by the *Los Angeles Times*, following an expose by Dr. Morris Fishbein editor of *The Journal, A. M. A.*, of some of the quackeries existing in Los Angeles. As quoted in a recent issue of the *A. M. A. Journal*, Mr. Rowell said in part:

"How, then, shall we distinguish which principles and practices of healing are scientific, and which are not? The simplest test is that which we unhesitatingly apply in every other branch of knowledge. That is the judgment of scientists.

If the scientists say that a certain thing is scientific, we accept it as such. If they all say it is unscientific, we say likewise, at least until it has succeeded in convincing them. Every scientific university in the world teaches astronomy, and not one teaches astrology. All of them teach chemistry, and not one teaches alchemy. Every university in the world teaches scientific medicine, and not one of them—not a single one in the whole world—teaches or recognizes any of the "schools" or sects for which the *Times* speaks. If the unanimous voice of science means anything, this is its verdict.

"The next test, and the decisive one, is that of method. Scientists may be mistaken, sometime, in their results and conclusions. Sometimes a thing which seems true in the light of incomplete information becomes only partly true in the light of later discoveries. But science is not mistaken in its method. That method is systematic observations and experiment, and the submission of these observations and experiments to the scientists of the world, for them to repeat, to test and to scrutinize. Whatever pursues that method and is approved by that test is scientific—including, in medicine, light rays for tuberculosis, diet for many ailments and hydrotherapy for certain mental conditions. Whatever does not proceed by that method, or fails by that test, is unscientific—including all the cults, sects and schools which Dr. Fishbein rejects and the *Times* defends."

Family Needs and Necessity Costs

"How is it that the husbands of today fail to supply the funds with which to buy the articles needed by the family?" asks Agnes L. Peterson, assistant director of the Woman's Bureau U. S. Department of Labor, in a recent summary of working conditions among the thousands of women employees of the country.

She sets forth her answer to this important question in the following paragraph:

"High standards and changes in our manner of living, with the accompanying increase in the cost of living, without commensurate increases in men's wages, and depreciation of the dollar are perhaps the most obvious explanations of the inadequacy of many men's wages to give their families even the barest essentials. * * * There is evidence that in many industries the men's earnings are inadequate to maintain their families on a reasonable health and decency level."

The explanation is quite interesting, as also is the recent statement issued by the U. S. Commissioner of Labor Statistics showing that the average cost of living in December, 1929, was 71.4 per cent higher than the average for 1913.

It is quite likely that the answer to many of the questions asked regarding the so-called problem of cost of medical care may be found in studies similar to these. Perhaps some of the captains of commerce and industry who are contributing funds to enterprises designed to socialize medical service would find the answer to some of the public's tribulations through careful perusal of the too moderate payrolls of the businesses which have made them financially independent, giving them the time and means to engage in philanthropic pursuits. It is futile to try to reach conclusions about the problem of distribution and cost of medical service until the intricate economic and social factors relating directly or indirectly to it and all other necessities of life have been dug out, dusted off and digested.

Commercialized Health

An important question in medical ethics, as well as one vitally affecting the private, competitive practice of medicine, is before the Committee on Ethics and Discipline of the Massachusetts Medical Society.

That committee has been asked to take action against a member of the Massachusetts Medical Society who has associated himself with several business men of Providence, R. I. in the operation of a "Better

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THIS IS THE LAST ISSUE WHICH WILL BE MAILED TO "DELINQUENTS"

If *you* are among those on the "delinquent" membership list of the State Association, you should get in touch with the Secretary-Treasurer of your county medical society or academy immediately. Prompt payment of dues will insure the continuance of *The Journal*, as well as other organization advantages.

In compliance with federal postal regulations the names of all unpaid members must be removed from *The Journal* mailing list after this issue.

Membership dues for 1930 were due on or before January 1. This obligation was met promptly by a large percentage of the members. As a courtesy to those few who, through neglect or oversight, have thus far failed to pay their 1930 dues, *The Journal* has been mailed for the first three months of this calendar year.

Health Bureau", the avowed purpose of which is "the selling of health diagnosis and health service at a fair cost". The company has advertised extensively and made every possible effort to capitalize on the reputation of the physician being criticized whose defense of his position is that he has not been administering treatment and that therefore his work does not constitute the practice of medicine.

The absurdity of this defense is obvious and at direct variance with the broad conception of the functions of the doctor.

The idea held by some that the practice of medicine is restricted to the treatment of a demonstrable disease is ridiculous. The diagnosing of diseases or the giving of a physical examination are every bit as much a part of the practice of medicine as the treatment of a specific ailment, and only competent qualified physicians should engage in such work.

The Massachusetts case illustrates the misunderstanding which exists in the minds of many concerning the scope of the practice of medicine and the duties of the physician.

Far too often, some individuals and groups engaged in public health activities leap at the false conclusion that the physicians in a community are neglecting the field of preventive medicine. They set about establishing clinics to serve those who should be served by private practitioners. In some instances no efforts are made to cooperate with the medical profession or attempts made to point out by physicians where they are falling down on the job, if they are, and how they can better serve the public. As a result of this excessive enthusiasm, lack of foresight, or commercial enterprise, various types of health centers are founded. The health of the public suffers and the doctors of the community find themselves competing with an organization financed by some misguided philanthropist or money-grabbing schemer. It is significant that those who do the loudest howling about the lack of interest of the physician toward preventive medicine are usually those who are behind agencies carrying on a work which the physician can best do and in most cases is already doing in connection with his private practice.

Restrictive Control

The mania for telling the medical profession how to practice its art and run its own business, which has reached epidemic proportions among certain groups of laymen during the past few years, is constantly breaking out in a new spot.

The most recent outbreak of such effort on the part of know-it-alls to tell the physician how to practice medicine and to infringe on the legal rights given the licensed practitioner of medicine is reported from Los Angeles where the City Council has passed an ordinance making it unlawful for any person, firm or corporation to sell, serve or give away within the city of Los Angeles any wine tonic or wine tonics, *or medicinal preparation* containing one-half of one per cent or more of alcohol by volume which is capable of being used as a beverage.

Despite the protests of physicians who cited the provisions of the federal statutes which make it obligatory to have all wine tonics contain 30 per cent of solid matter, thus practically placing such mixtures in the non-beverage class, and who called the attention of the Council to the infringement of such an ordinance on the rights of a licensed physician, the ordinance was approved without a dissenting vote.

As pointed out in the editorial columns of *California and Western Medicine*, "a perusal of the ordinance demonstrates that it is a most excellent example of what might be termed the intemperate legislation so often put forward by some modern-day lawmakers."

Declaring that so far as the medical profession was concerned it may be assumed that few doctors would have wished to practice such so-called wine tonic mixtures, the California Journal makes the very significant statement that "physicians were concerned, however, when lay citizens even though they were public officials, took it upon themselves to determine what doctors should or should not prescribe, for such lay action involved a principle and an infringement on presumably legal rights, in which members of the medical profession have a very natural interest".

That journal also calls attention to the large number of useful medicinal and pharmaceutical mixtures capable of being used as a beverage and containing more than one-half of one per cent alcohol which would be suppressed under provisions of the ordinance.

"It must be self-evident to any person of reasonable knowledge of the world that an ordinance such as this cannot and will not be literally and impartially enforced", it is pointed out. "This is the kind of lawmaking which does much to lower the respect of many citizens for all law * * * What a pity that municipal and other legislators should permit themselves to be carried off their feet by supposed public clamor or political influences, and to allow themselves to pass legislation which not only cannot be enforced but which is so ridiculous and impossible of impartial enforcement that the majesty and respect for law which is so necessary and fundamental for progress in all real civilization is through such unwise action, put in jeopardy."

The Diagnosis and Surgical Treatment of Tic Douloureux*

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A CONSIDERABLE proportion of the neurological surgeon's time is devoted to the treatment of trifacial neuralgia, or tic douloureux. During the past four and a half years I have performed 507 neurosurgical operations including operations for brain tumor, for spinal cord tumor, peripheral nerve injuries, cranio-cerebral and spinal cord injuries, hydrocephalus and meningocele, and operations upon the sympathetic nervous system, and in this series, 105 operations, or 2.07 per cent, have been for the relief of tic douloureux.

ETIOLOGY

The etiology of tic douloureux is not known. It has been suggested by Frazier that the cause may be a sclerotic lesion of the ganglion, while Dana believes it to be a degenerative lesion. We have made a practice of removing a small portion of the sensory root for microscopic examination in operations for tic douloureux, and examination has disclosed either normal tissue or a mild degree of round-cell infiltration.

The disease is essentially one of middle or advanced age. In our series of 103 cases the average age of the patients was 57 years, the oldest patient being 84 years old and the youngest 34. In our series there was a predominance of female patients; there were 63 women and 40 men. Ordinarily, however, both sexes are affected equally. In 65 of our cases the neuralgia involved the right side of the face, and in 34 cases the left, while in four it was bilateral.

SYMPTOMS

The pain of trifacial neuralgia is the most severe pain that a member of the human race is ever forced to suffer; it is so hard to endure that many of these patients, if not relieved, commit suicide.

At the onset the neuralgia appears in only one or occasionally in two adjacent branches of the trigeminal nerve, and it remains localized in this area for some months or even for years. Commonly the third division of the nerve is involved first. The pain always progresses, however, and sooner or later, if life continues, it involves all three divisions of the nerve. It spreads in the direction of anatomical continuity, that is, it always spreads to an adjacent division of the nerve without ever skipping a division. The order of the involvement of the divisions of the nerve may be 3, 2, 1; 2, 3, 1; 2, 1, 3; or 1, 2, 3.

The pain is excruciating in character and comes on in terrific paroxysms, which the patients describe as resembling an electric shock, the stab of a knife, or searing with a hot iron. It is the paroxysmal nature of the pain that tends to differentiate it from other types of facial neuralgia. Although the individual paroxysms last for only a few seconds, they may occur as often as from 50 to 100 times in 24 hours, and there may be days, weeks or months when the patient is likely to have a paroxysm at any moment.

During this time the paroxysms may be initiated by the slightest touch or may occur if the most insignificant breeze blows upon the affected portion of the face; consequently these patients usually wear a shawl or large handkerchief over the face. Washing the face, shaving or combing the hair may initiate an attack, so that frequently one sees a patient with thick seborrheic collections on the face, or with the face unshaven or hair uncombed. Talking, eating or even smiling may bring on one of the dreaded paroxysms; therefore the patient may talk in a monotone, scarcely opening his mouth, and in some cases he will even avoid speaking altogether, keeping a pad and pencil by his side for purposes of communication. He may cultivate a mask-like expression and may go for days at a time without eating. The breath is often foul because saliva is allowed to accumulate in the mouth without being swallowed. Rubber heels are often worn by the sufferer to prevent unnecessary jolting and he may take extreme care to walk gently.

There is usually a small area such as the tragus of the ear, the inner canthus of the eye, or the side of the nose that is especially sensitive to touch and acts as a 'trigger point'.

The participation of the facial nerve may or may not be noted during a paroxysm. When it is affected, this is manifested by an involuntary unilateral contraction of the facial muscles. One usually sees also a marked unilateral vasomotor reaction during a paroxysm, a unilateral flushing of the face and also a hypersecretion of the lacrimal, salivary and nasal glands on the affected side.

The integrity of sensation in the face is to be expected in true trifacial neuralgia, unless operative procedures have been instituted; consequently any marked loss of sensation makes one suspect that the diagnosis of tic douloureux is not correct.

Remissions are characteristic of the disease. When a remission occurs, the poor sufferer believes, of course, that the last treatment instituted is responsible for the cessation of the pain; but when the pain returns, he discovers to his sorrow that the treatment is of no avail.

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Dr. Locke, the author of this paper, died May 15, 1929, as a result of injuries received in the Cleveland Clinic disaster.

DIFFERENTIAL DIAGNOSIS

There are many types of facial neuralgia which must be carefully distinguished from true tic douloureux. For example, the internist sees neuralgia of the face associated with lues, malaria, diabetes, or with some acute infection such as influenza; the nose and throat specialist sees facial neuralgia associated with disease of the nasal sinus, with tumor of the antrum or of the frontal sinuses or with tonsillitis; the eye specialist finds it in cases of glaucoma or of corneal ulcer; the dermatologist, following herpes zoster of the face; the dentist, in cases of unerupted and abscessed teeth. When associated with these conditions, the facial neuralgia consists of a dull, aching and usually continuous pain, which may have an occasional sharp element, but never the sudden short and excruciating paroxysms characteristic of tic douloureux.

TREATMENT

There are only two satisfactory forms of treatment for tic douloureux. (1) An interruption of the peripheral branches of the nerve by alcohol injection or peripheral neurectomy; and (2) The gasserian ganglion operation consisting of the severance of the sensory root at a point central to the gasserian ganglion. No drug has been found that has any distinct effect as a therapeutic agent. Removal of foci of infection usually does not give even temporary relief.

The second and third divisions of the fifth nerve can readily be injected with alcohol at points very near their points of exit from the cranium, before these nerves have divided into their various branches. These injections give very satisfactory results when the neuralgia is confined to one of these two divisions of the nerve, and as I have already pointed out, one of these areas is the usual site of the initial paroxysms. The alcohol injections give only temporary relief, of course, which may last from six months to two years. They are, however, of very distinct advantage in the treatment of tic douloureux. Not only do they give complete temporary relief from a most agonizing affliction, but they prepare the way for the gasserian ganglion operation which must follow sooner or later. It is of great advantage to have the patient become accustomed to numbness of the face before a posterior-root section is performed. Furthermore, the complete relief of pain which follows an alcohol injection serves to confirm the diagnosis and to assure the success of a subsequent gasserian operation.

I always prefer alcohol injection of the second or third division to peripheral neurectomy because the nerve may be blocked at a more central point. A peripheral neurectomy of the second or third division of the nerve is performed only in the event that the alcohol injection has been unsuccessful.

The injection of the first division of the fifth nerve does not produce very satisfactory results because this division can be reached only at a point very near the periphery. Therefore, when the paroxysms are confined to the first division, a supra-orbital incision in the brow is made and the supra-orbital nerve is evulsed by twisting it on a hemostat.

Since an alcohol injection or a peripheral neurectomy is carried out at a point peripheral to the ganglion, regeneration of the nerve is sure to occur. On the other hand, the cutting of the sensory root central to the ganglion precludes all possibility of regeneration. Section of the posterior root of the ganglion is the only means whereby this affliction can be permanently cured.

Some years ago the gasserian ganglion operation was a most formidable procedure and was accompanied by a high operative mortality. We now are able to perform this operation with an operative mortality of about two per cent. I have performed forty-five consecutive gasserian ganglion operations without a death, and this in spite of the fact that many of the patients were advanced in years, had arterio-sclerosis and hypertension, and were thus poor surgical risks.

TABLE I

TIC DOULOUREUX

(September, 1924 to May, 1929.)

Number of cases	103
Total operations	105
Alcohol injection	46
Peripheral neurectomy	14
Gasserian ganglion operation	45
Mortality	0

Postoperative complications have been unusual in our cases. Only one patient had a neurotrophic disturbance of the eye and in this case, after prolonged treatment, the vision was conserved. I attribute the low incidence of this kind of postoperative complication to the fact that careful verbal and printed instructions as to the care of the eye are given to each patient when he leaves the hospital. Facial paralysis has occurred in only one case of our series, and in this case the facial weakness disappeared completely in three weeks.

I believe that no other surgical operation affords as great relief from suffering, and that consequently no other type of patient is quite so grateful as one who is permanently relieved of tic douloureux.

Case I.—Onset of right trifacial neuralgia 32 years ago. Right gasserian operation 10 years ago; motor root not saved. Appearance of trifacial neuralgia on left side. Gasserian operation with conservation of motor root. Complete relief.

The patient was a woman, 72 years of age, (Fig. I), who was referred to the author on December 4th, 1928, by Dr. Robertson, of Port Orange, Fla. Thirty-five years before she had begun to have paroxysms of stabbing pain in the right maxilla. Soon the pain involved also the right mandibular region. Three alcohol injections, made by a Chicago surgeon, gave tem-

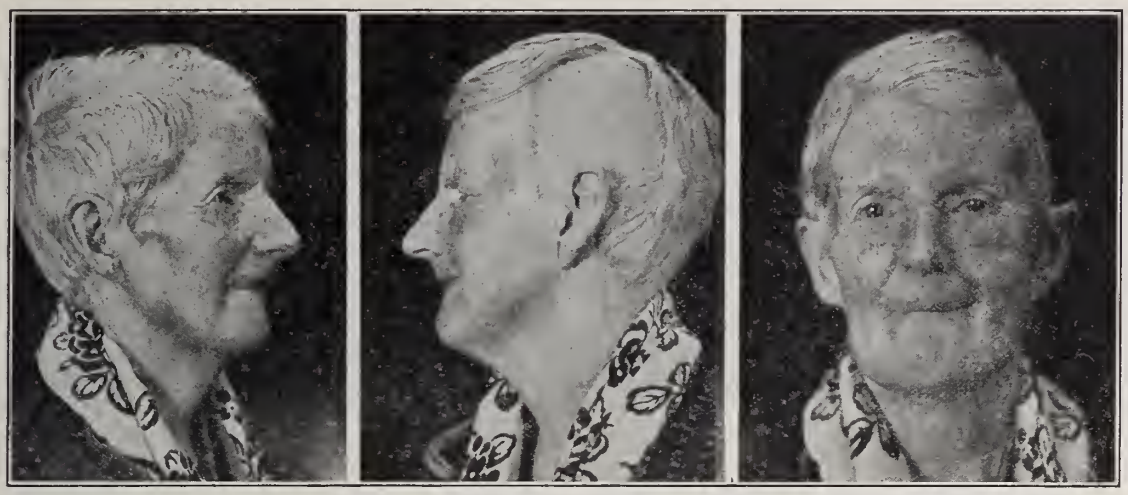


Fig. I. (Case I.) A—View of right side of face showing atrophy of temporal and masseter muscles following right gasserian ganglion operation, performed in 1918, in which motor root was not conserved. B—View of left side of face eight days after left gasserian ganglion operation performed in December, 1928, in which motor root was conserved. C—Front view of face eight days after left gasserian ganglion operation. Note infra-orbital scar on left side of face, the result of a peripheral neurectomy performed in 1921.

porary relief. After the pain had again appeared, an abdominal operation for the correction of intestinal stasis was performed by another Chicago surgeon in the hope that it would give relief, but it was of no avail. In 1918 the patient obtained complete and permanent relief of the pain on the right side of the face following a gasserian ganglion operation performed by a neurological surgeon of Baltimore. Three years later, however, similar excruciating pain appeared in the left side of the face. Peripheral neurectomy. (See Fig.. I,C), gave temporary relief. For four months prior to our examination, however, the patient had had a return of the pain. Terrific paroxysms were initiated by talking, eating, drinking or touching the face.

Examination revealed a rather poorly nourished, small, elderly woman, suffering from frequent paroxysms in the left side of the face. During the paroxysms the patient grasped the left side of her face and the muscles were all tense as she writhed in pain. A physical examination revealed no other abnormal condition. Pulse, 72; blood pressure, 120/70.

Neurological examination of the head showed an operative scar in the right temple. *The cranial nerve examination* gave normal findings except for the right fifth nerve; complete loss of sensation was noted in all three branches. There was also a complete motor paralysis of the fifth nerve with resulting paralysis and atrophy of the right temporal and masseter muscles, and deviation of the jaw to the right. (See Fig. I,A). The corneal and nasal reflexes were absent on the right. The sensory and motor examination of the left fifth nerve gave normal findings. *Motor and sensory* examination gave normal findings. The *reflexes* were active and equal throughout and there were no pathological reflexes. Clinical examination of the various cerebral areas gave normal findings.

Operation. On December 10, 1928, a left gasserian ganglion operation, with avulsion of the sensory root and preservation of the motor root, was performed by the author. (Fig. I,B).

The patient made an uneventful recovery and was discharged on the tenth postoperative day completely relieved of her pain.

Comment: This case is unusual in that the tic douloureux was bilateral. Only very few cases have been reported in which a bilateral gasserian ganglion operation has been performed. The surgical problems at the last operation were especially difficult because at the time the gasserian operation was performed on the right side the motor root was not saved, and it was necessary to make certain that the left motor root be conserved as otherwise the patient would have lost the control of her lower jaw.

Case II.—Agonizing paroxysms of trifacial neuralgia of all three divisions of right fifth nerve, with 'trigger point' in second division. Alcohol injection of second division, with no relief. Gasserian ganglion operation, with complete relief.

The patient, a married woman 76 years of age, (Fig. II), was referred to the author by Dr.

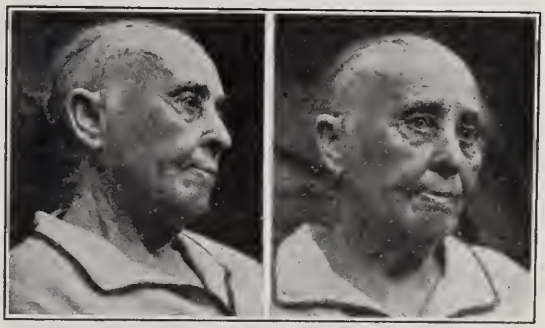


Fig. II. (Case II.) A—View of right side of face eight days after right gasserian ganglion operation, performed in October, 1924. Note the curved incision which was in use at that time. B—Front view of face eight days after operation.

C. J. Martin, of Alamo, Texas. She had suffered from agonizing paroxysms of trifacial neuralgia for one year. The paroxysms at first involved only the second division of the fifth nerve, but three or four months after the onset they involved also the first and third divisions. The pain was excruciating and came on very sudden-



Fig. III. (Case III.) A—Lateral view of face eight days after right gasserian ganglion operation. Note operative scar. B,C—Front and side views of face two months after operation.

ly. It was initiated by touching the face, by talking, eating and especially by touching or combing the hair. The paroxysms occurred four or five times daily. They were always confined strictly to the right side of the face. Thinking that the pain might be caused by the teeth, the patient's dentist had extracted some of the teeth of the right upper jaw, but the pain had not, of course, been relieved.

Physical examination revealed a fairly well developed and nourished elderly woman. Pulse, 84; blood pressure, 165/100. Marked arcus senilis. Slight enlargement of the heart with a systolic murmur at the apex.

Neurological examination: Cranial nerve, fundus, motor, sensory and reflex examinations all gave normal findings. During an excruciating paroxysm the patient would grasp the right side of her face and all the muscles were tense as she strained under the pain. The 'trigger point' was over the right maxilla and even a gentle touch on this area produced a terrific paroxysm.

Diagnosis: Tic douloureux, right.

Operation: On September 25th, 1924, an alcohol injection of the second division was made in the hope that blocking of the 'trigger-point' area would stop the paroxysms. Following the injection the patient continued to have pain which involved the first and third divisions. On October 1st, 1924, a right gasserian ganglion operation with avulsion of the sensory root was performed. (See Fig. II,A,B). Complete and permanent relief was obtained and the patient was discharged from the hospital on the tenth postoperative day.

Case III.—Long-standing tic douloureux. All teeth removed without relief. Gasserian operation with complete relief.

The patient, a married man, 61 years of age, (Fig. III) was referred to the author by Dr. H. C. Temple of Alliance, Ohio, on September 15, 1927. For eight years this patient had suffered from paroxysms of excruciating trifacial neuralgia. At the time of the onset the pain involved the second division of the right trigeminal nerve and a few months later it involved also the first division, but it was never bilateral. The pain was described as being like the cutting of a knife and the paroxysms were initiated by talking, eating or touching the cheek. The 'trigger point' was at the angle of the mouth on the right side. During the previous eight months the terrific pains had come at intervals of about ten minutes. All the teeth had been removed with, of course, no relief. The patient had been told by many doctors that there was no cure for his condition, he had become much depressed, and like many of these patients had contemplated suicide.

Examination: A well developed, poorly nourished male. Pulse 72. B.P. 120/70. The physical examination gave essentially normal findings. The neurological examination showed the cranial nerves, optic discs, motor system, sensory systems and the reflexes to be normal. During a paroxysm of pain the patient would writhe in agony and would rub the right side of his face very forcefully and this act had been performed so frequently that the skin of the right cheek had become red and indurated. There was twitching of the muscles on the right side of the face and also excessive lacrimation of the right eye during an attack of pain.

Diagnosis: Tic douloureux, right, first and second divisions.

Operation: On September 19, 1927, a gasserian ganglion operation with avulsion of the sensory root was performed. (See Fig. III,A). The motor root was preserved so that there was no deviation of the open jaw. Complete and permanent relief was obtained. (See Fig. III,B,C).

Comment: This patient, like many others with this affliction, had had his teeth extracted in the hope of gaining relief from pain. The history of the case also illustrates the fact that it is a common belief among doctors that the gasserian ganglion operation is very dangerous. The patients are therefore sentenced to endure the prolonged tortures of this disease.

CONCLUSION

1. Excruciating paroxysmal pain, the most severe pain that a member of the human race may endure, is characteristic of tic douloureux.

2. When the pain is confined to one division of the fifth nerve, temporary relief is afforded by alcohol injection and this procedure is indicated. When the neuralgia involves more than one branch, an avulsion of the sensory root of the gasserian ganglion should be made.

3. The gasserian ganglion operation is no longer a dangerous procedure in the hands of the trained neurological surgeon.

The Relation of Climate to Functional Disturbances in the Body*

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ALTHOUGH no one has yet been able to measure the effect of climate, or weather, on the human body, we are all conscious of its importance. This consciousness is reflected in the frequent references to the weather in our daily conversation. Our march of conquest over the physical hindrances of life (airplane, radio, etc.) has not yet included much advance toward control of the effects of climate on our bodies. The heating and ventilating of dwellings was one great step, and some day perhaps we will be using cooling devices on the same large scale to overcome the effects of heat.

Ellsworth Huntington, a research student of geography at Yale University since about 1902, has spent the last 25 years studying climatic changes in various parts of the earth and their correlation with the rise and fall of civilizations of past centuries. He presents in his various books what seems to be ample proof that climate has been the most important single factor determining the type of development in nations and that it was usually either an increasing aridity or humidity that led to each decline. His studies have shown beyond doubt that great climatic changes have occurred in different places on the earth.

I will not go into the details of his investigation, but will simply state his conclusion, that man works most efficiently and in best health where the average daily temperature is about 64 degrees F. with not too extreme deviations from this, and with a relative humidity of about 60%. Storms and rather marked day to night temperature fluctuations he found very stimulating. Prolonged periods of high temperature and high humidity he found most deleterious, while continuous perfect weather, without storms, becomes monotonous and finally depresses man.

Huntington's observations and conclusions, although of great importance in emphasizing our dependence on climatic forces, still offer no explanation of the mechanism of these climatic effects.

While in Peking, China, during the past two years, I had an opportunity to study rather closely the physiological and metabolic characteristics of the Chinese people and the probable effect of climate in determining these traits.

For convenience I will first describe the climate of Peking, later taking up the bodily disturbances which I have attributed to the climate. In the September (1928) issue of the *Archives of Internal Medicine* I presented charts showing the variations in temperature, relative humidity and rainfall in Peking for a number of years. The temperature curve for the year shows very gradual changes from week to week, with little day to day, or day to night, variation. There is a steady rise from January to June, a sustained maximum through June and July, and then a steady fall the rest of the year. The relative humidity behaves similarly, being very low at all times except during the summer months. All during June and July it averages almost 80%. It is during this period also that over 5/6 of the yearly rainfall occurs. Thus the midsummer season is truly tropical,—constant heat, day and night, for six to eight weeks, with the air about 80% saturated with water vapor. The torrential downpours that take place afford no relief from the oppressive moist heat. One day in the summer of 1927 the temperature was 114 degrees F. in the shade and the relative humidity 92%. We slept every night during this summer period with electric fans blowing directly on us to achieve some measure of comfort.

Such a period of moist heat as just described is not peculiar to Peking, but is encountered in all North China, Korea, Japan and southern Siberia. It may occur in other countries as well, but my studies have not been completed in that respect. In Japan the death rate mounts to the highest peak of the whole year just at the end of the hot rainy season. I will say more later of the importance of this period on our health.

Under such conditions as just described it is obvious that one automatically, or unconsciously, reduces heat production to a bare minimum on account of the difficulty of heat loss. Bodily activity above the level of absolute rest is closely associated with functional activity of the adrenal glands. Activity of these glands always results in increased heat production in the body. Therefore, in times of prolonged moist heat, such as one encounters in Peking, the adrenals suffer an extreme reduction in function. If this reduction be sufficiently acute, the individual will suffer heat stroke or heat exhaustion, while if the suppression be more gradual a quite different train of symptoms may ensue. These I will describe a little later.

Before going on with the disturbances directly attributable to the summers, let me picture the general condition of the people as a whole. Although usually well nourished, they are physically sluggish, with low blood pressure, low basal metabolism, subnormal hemoglobin and low

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erythrocyte and leucocyte counts. In all these they stand about 10% below our American standards. When these people go to Europe or America for two or three years, they tend to approach closely to the American levels, and when Americans spend a like period in China most of them approach the Chinese levels. This is particularly true of the blood pressure, both systolic and diastolic. It was at first thought that these effects of residence in China were due to dietary deficiencies in protein, but a close analysis of even the poorest dietary of the natives shows a protein intake of about 95 gms. daily,—not far below that of the average American.

The fact that Chinese abroad are so different from those at home, and that those who go abroad and return to China soon revert to their former low levels, leads one to the belief that the principal factor responsible for the changes is climate. This belief is further strengthened by the finding of similar changes in Westerners who reside in China for several years.

During my last year in China I became much interested in a number of patients exhibiting a rather definite set of symptoms and findings, in many cases with a history of onset quite closely related to the summer heat. The principal features of these cases were: Low blood pressure, weakness, loss of weight, vertigo, hypermotility of the gastro-enteric tract, with either spastic constipation or watery diarrhea, and spasm of the various sphincters. There was frequent epigastric pain and sometimes vomiting. The blood sugar was often low, with a high tolerance for glucose. Urticaria and increased pigmentation of the skin were occasionally seen. Menstrual disturbances were frequent, especially dysmenorrhea and menorrhagia.

In seeking for a single basis for this picture, and at the same time associating it with their characteristic summer climate, I came to the conclusion that low adrenal function was the responsible factor. Hypoadrenalism would result in vasomotor relaxation, and, to judge from the most reliable pharmacological and physiological work, it would permit hypermotility or spasticity of the entire gastro-enteric tract. It is common knowledge that the injection of adrenalin quiets peristalsis in the intestines, while Blackfan and Shipley found that surviving pyloric strips of newborn pigs and premature infants were also caused to relax by adrenalin. In like manner the bronchioles and uterus have their musculature relaxed by adrenalin. Hypoadrenalism, therefore should produce hypotonia of the vascular system and hypertonia of the smooth muscles of the rest of the body. This is, in effect, just the condition encountered in these patients.

In attempting to complete the proof that the symptoms were due to low adrenal function, I gave adrenalin by injection, sublingually, and per os. In the great majority of cases complete relief from the disturbing symptoms was obtained within three days after starting the adrenalin therapy. In most cases it was given in 30 per cent glucose solution per os, 1 mgm. of adrenalin half an hour before each meal. I am aware that adrenalin is considered to be without effect when administered by mouth, but in these cases there could be no doubt of the result. The gastro-enteric disturbances would rapidly abate and the general state of the patient rapidly improve. The blood pressure would rise only slowly, taking two to three weeks for any considerable change.

The author's baby, born in Peking in July of last year, served as one of the best experimental animals. As the colder weather of winter came on he began to exhibit an increasing inability to take food, which the pediatricians could not account for. From December to April he lost about 30 per cent of his body weight, and got down to taking only 1½ oz. of milk at a feeding. Any larger quantity of food caused vomiting. Noticing the active intestinal peristalsis during feeding, I tried 1/20 mgm. of adrenalin before each feeding. There was an immediate change. By the next day he was taking full feeding of milk, cereal and vegetables in a perfectly normal manner. Three weeks later I stopped the adrenalin and within two days the previous trouble returned. After giving the adrenalin twice daily for about six weeks, I finally stopped it again, but this time out in Mid-Pacific, with raw, cold foggy weather. There was no further trouble until last August when a few further doses were required. The child is now normal in weight and health.

On returning to Cincinnati in August, I began daily work in the Medical Outpatient Clinic. As you may remember, the first half of August was very disagreeable because of the continuous hot humid weather, both day and night. Much to my surprise I began to see many patients here with the same symptom complex as I had seen in Peking. The symptoms here were gastro-enteric disturbances with spastic constipation more often than diarrhea. Low blood pressure was again a frequent finding. The administration of adrenalin was in many instances very beneficial, but in others not so striking as I had hoped.

Just recently I have learned that Dr. Flipse has been studying a much similar condition at Miami, Florida, and that since reading my article, he has found adrenalin by mouth to relieve many of his patients.

Summarizing then, I may say that definite disturbances of body function may result from too prolonged and severe moist heat, and that these disturbances are probably based on a hypofunction of the adrenal glands. Just how adrenalin helps these patients is not known. It will not relieve the symptoms of Addison's disease, but where there is only a functional suppression it seems to act as a definite stimulant to the glands.

Such a consideration of symptoms on a functional basis should prove useful in many instances where gastro-enteric disturbances are present. Whether such disturbances in function may lead to such definite diseases stated as gastric or duodenal ulcer still remains to be demon-

Empyema of the Antrum of Highmore

SECORD H. LARGE, M.D., Cleveland, Ohio

QUITE a number of authors are of the opinion that "Empyema of the Antrum of Highmore" is on the increase. Others deny this and think the disease is being more readily recognized. It seems to us that it is on the increase.

During the last three years we certainly have noticed its greater frequency in the female. Prior to that most of our cases were in the male —but now we seem to have it just as often in the female. Whether it is due to their change in dress, we are unable to state definitely, but it would appear to be so. We feel that such a radical change certainly has something to do with contraction of colds, due to chilling of the body surface. Eventually the skin now exposed will become tolerant to these changes.

Congestion in large cities plays a factor in the contraction of head colds which lead to empyema of the paranasal sinuses. Until we have some way to control the heating and ventilation of public places, we cannot look for a decrease in these affections. Practically all the cases of empyema of antrum we see follow a head cold. The dentist, as a rule, sees those cases that are due to infection of the teeth.

We must first begin the proper treatment of head colds. We have come to the conclusion that the best treatment is confinement to bed for at least twenty-four to forty-eight hours. When this treatment is carried out we have had practically no complications. When we see a case of acute empyema of antrum we advise the patient to remain in bed or at least to remain indoors. In most of these cases their resistance is low and nature does not have a fair chance to repair the damage done. The patient also runs a great risk of reinfection if he frequents public places where there is great congestion.

As to local treatment—first, every three hours we now use ephedrine, three per cent, instilled into the nose, the patient's head in the occipito-atloid position, having them remain in this position for at least two or three minutes; cocain is, in our opinion, the best drug, but we never prescribe it—we use it at least once daily, personally making the application; steam of menthol in tr. benzoin compound, radiant heat, proper elimination, light diet, but no watery nasal douches.

As to vaccines, we have ceased their use. For seven years we have been experimenting with vaccine for head colds and their complications. We have used the autogenous chiefly but have also used the stock alone, or mixed with the autogenous, but have come to the conclusion that they were of little service, or in fact, none. Some of the European pathologists with whom I discussed the subject think that there is a possibility of their being harmful. Only in one of our cases did the patient think that the vaccines had made him more susceptible to colds. He stated that he was positive that his colds now lasted longer. We doubt this.

At the time of operation for chronic empyema of the antrum of Highmore, we were able to demonstrate the streptococcus in almost every case, either in free pus or in the lining of the antrum. So we experimented with just the streptococcus vaccine in the following manner—we made a culture, mixed it with other strains of streptococcus in the same culture tube, incubated them, and made the vaccine which we called "re-inforced vaccine". We believe this is the first time this method has been used. We had great hope for this vaccine but were doomed to disappointment, as the majority of the cases showed no improvement, so we have abandoned it.

LAVAGE

Our preference is through the normal ostium. This can be accomplished in about fifty per cent of our cases. Others claim a much higher percentage. We also prefer the small puncture needle, using the area under the inferior turbinate.*

POSITION OF PATIENT FOR THE PUNCTURE

In most of the cases, the puncture is performed in the upright position, but we would like to suggest to you trying the inclined or semi-inclined position, especially in nervous and younger patients. We have found a few inhalations of ethyl chloride a great aid, especially in nervous cases.

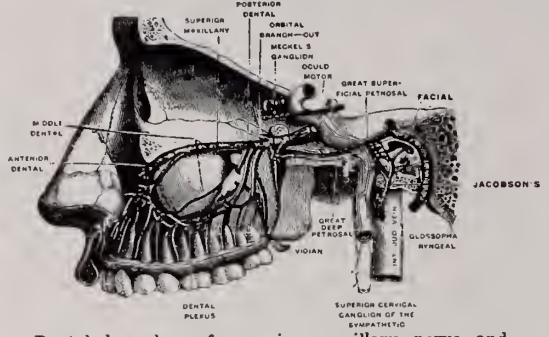
As to frequency of the lavages—we were in the habit of making them daily; now we make them every second or third day. After ten days, or at the most, two weeks, if discharge shows no appreciable diminution, we advise the window resection. In nervous cases and children, we advise window resection very early, as punctures are about as much a shock to them as the operation itself. In infants and young children, operation for drainage is performed as soon as diagnosis is made.

We feel that we had rather err in early interference than too late, as the mucus membrane of the antrum is of a very low order, being very

Read before the Eye, Ear, Nose and Throat Section, Ohio State Medical Association at the 83rd Annual Meeting, Cleveland, May 7-9, 1929.

*Note. Since writing this paper we are able to lavage through normal ostium in over 90 per cent of our cases.

FIG 1



Dental branches of superior maxillary nerve and spenopalatine ganglion (Testut.)

thin, adherent to the bone, scant in mucus glands, the cilia epithelium being very delicate and easily destroyed.

Our method of making the window is a submucus resection, in other words, a submucus Krause window resection. The naso-antral wall is anesthetized the same as for a septal submucus. If the inferior turbinate encroaches on the floor it is fractured upwards with Killian's sharp blade nasal forceps, or even its anterior attachment may be temporarily severed.

A quadrilateral flap is now made in the area below the inferior turbinate and this flap is dissected up and held back by a pledget of cotton. A curved chisel makes the initial opening in the antro-nasal wall and this opening is enlarged by punch forceps. We had complicated instruments made, but have discarded them, as they were not practicable. Only one was retained—a curved knife to make the upper and lower incisions for the quadrilateral flap, but these can be made with a straight knife.

We have tried to turn the flap inwards and hold it there by silver wire clamps, or easier still, by packing the antrum in the following manner: Gauze saturated with tr. benzoin compound and then immersed in sterile vaselin. It is left for forty-eight hours, after which time the flap is adherent to the inner wall of the antrum.

This is not of so much importance in acute and subacute cases, but in chronic cases it is of great importance as the artificial opening remains open longer. If the nares is narrow a preliminary submucus resection of the septum is advisable. The advantages of the submucus flap are that you are working in a bloodless field; you are able to inspect the size of the desired opening; it is less painful and the injury to the mucus membrane of the nose, as you can readily understand, is certainly less.

CHRONIC EMPYEMA OF THE ANTRUM

We have come to the conclusion that in any operation through the anterior wall of the antrum, there is grave danger of destroying the nerve supply to the teeth, especially is this true in the Caldwell-Luc. If you examine the dental nerve plexus which is made up of anterior middle and posterior dental nerves, you will readily see how this is so. Most authorities state that these nerves are only temporarily damaged and become regenerated.

On taking this question up with our anatomists of Western Reserve University, they state that such a condition cannot occur.

In the Caldwell-Luc, all these branches may be severed; in the Denker, the middle and anterior branches and in the Canfield, the anterior.

In one of the largest clinics in Europe they have given up the Caldwell-Luc and Denker operations where normal teeth are present.

If a radical operation has to be performed, we think the best results are obtained by a combination of Denker and Caldwell-Luc, with the quadrilateral flap anchored in the same manner as stated above.

The point we wish to bring out is that the patient should be told that if these operations are performed there is danger of causing destruction of the nerve supply to the teeth. Today we look upon a dead tooth as a foreign body and feel that eventually it will cause trouble.

One important point we learned from our confreres abroad is that the use of a post-nasal plug in all operations on the nose, under general anesthesia, eliminates lung abscess, a condition practically unknown in the British Isles.

Possibly some day we will approach the antrum in chronic cases through the hard palate, as this route has been proved to be the best for malignant growths of the antrum.

We believe the important factor in empyema of the antrum of Highmore is early drainage through window resection in the naso-antral wall, even if the anterior part of the inferior turbinate has to be sacrificed.

610 HANNA BLDG.

DISCUSSION

SAMUEL IGLAUER, M.D., Cincinnati: Dr. Large has emphasized an important point as to the danger of injuring the nerves to the teeth, involved in the Caldwell-Luc operation. If one examines an injected specimen it will be evident that not only the nerves to the teeth will be severed, but also the small arteries which accompany the nerve fibres to the apices of the teeth. It therefore follows that the affected teeth are thoroughly devitalized by this operation. Of course, it is necessary in many cases to perform this operation despite the injury to the teeth, just as, for example, the general surgeon may sacrifice the facial nerve in removing a malignant tumor of the parotid gland. Therefore the indications for a Caldwell-Luc operation should be well established and whenever possible an intra-nasal approach should be employed.

If Dr. Large can perfect an operation through the hard palate, it will constitute a distinct advance in the radical surgery of the antrum.

Brucella Abortus Infection in Children

GEORGE MARTIN GUEST, M.D., Cincinnati, Ohio

IN 1924 Keefer reported the first human case of undulant fever which was demonstrated to be due to infection with the abortus bacillus. Before that date the micro-organism which causes bovine infectious abortion was generally believed to be non-pathogenic for man, but since then the rapidly increasing number of similar cases which have been reported indicates that this disease constitutes a public health problem of considerable importance.

In 1927 Alice Evans collected 20 cases reported by various persons. In 1928 Kern collected 36 cases from the literature and Carpenter and Boak had collected a total of 69 cases. In 1928 Carpenter and King state that they know of 155 cases of undulant fever, apparently definitely due to the abortus bacillus. These cases are being discovered wherever interested individuals are making an intensive search for them and it is probable that many cases pass unnoticed or misdiagnosed in localities other than those in which they are now being recognized. It is apparent from study of the cases reported and from the low incidence of the disease among those persons exposed to infection from drinking raw cow's milk known to contain the abortus bacilli that these micro-organisms must have a low pathogenicity for man, but even as an agent of low virulence it must demand our consideration because of its extremely widespread distribution in animals and in milk, and because of the consequent frequent exposure of children as well as adults to the infection.

The micro-organism which causes Malta fever was discovered and described as the micrococcus melitensis by David Bruck in 1887. In 1897 Bang and Stribold isolated a micro-organism from the fetus of a cow with impending abortion and indicted it as the cause of infectious abortion of cattle, naming it the Bacillus abortus. Alice Evans in 1918 showed that these two organisms were so closely related that they were differentiated by the usual laboratory methods with great difficulty. The so-called Malta fever organism is found in large numbers in the milk of infected goats, and man is extremely susceptible to infection from drinking such milk. This disease is, of course, most frequently encountered in the Mediterranean countries where goat's milk is most commonly used, but it exists also in those parts of the United States where goats are raised, and in Texas and Arizona it is popularly known among the goat herders as "Goat fever". The abortus bacillus has been known to be frequently present in cow's milk since 1911 or earlier, but until Keefer's observation in 1924 this fact was not thought to have much significance.

These related micro-organisms have been classified in the Bacteraceae family, in a separate genus named Brucella in honor of David Bruce, and the types designated variety melitensis and variety abortus. The two varieties of micro-organisms cannot be differentiated by microscopic or cultural methods and serologically they are more closely related than are the serological groups of the meningococci. The organisms in each case are tiny Gram-negative staining bacilli, so small that Bruce in his first report mistakenly described the Malta fever germ as a micrococcus. They are grown with some difficulty in the initial culture from the host, usually growing best in slightly increased (10 per cent) carbon dioxide atmosphere. No sugars are fermented and an alkaline reaction is produced in litmus milk. They are killed by heating to 52°C. for 30 minutes. Specific agglutinating antiserum produced against either the melitensis or the abortus variety by animal inoculation may agglutinate both micro-organisms in equal titer, but by delicate agglutinin absorption tests eight serological groups can be distinguished. Rabbits and guinea-pigs are extremely susceptible to infection and these are the animals usually employed in laboratory studies. Guinea-pigs are less susceptible to the melitensis than to the abortus variety, while monkeys, like man, are more susceptible to the melitensis group. Different strains vary somewhat in the anatomical changes which they produce in animals; small doses may produce no perceptible sign of disease other than a transitory loss in weight and slight lymphadenopathy, while larger doses of the same strain or of strains more virulent for the animal may produce focal lesions in the liver, spleen, kidney, testes, epididymis. These focal lesions are seen as nodules of endothelial cell proliferation resembling the cells focalized by Bacillus tuberculosis, but they do not undergo the same retrogressive changes. The micro-organisms have been cultured from the spleens of guinea-pigs a year after inoculation and long after complete recovery of the animals from signs of the infection. Certain strains, particularly the porcine strains, tend to produce focal necroses in bones, affecting especially the carpal bones, ribs, and the flat bones of the skull; involvement of the flat bones of the orbit may produce marked exophthalmos.

Infectious abortion is the most widespread of all animal diseases, and has a greater economic importance than any other—not excluding tuber-

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*From the Department of Pediatrics, University of Cincinnati College of Medicine and the Department of Pediatrics, Harvard Medical School, Boston.

culosis. The disease affects cows, hogs, sheep, dogs, horses, and it may exist among wild rodents. In different States the infection has been demonstrated in from 10 per cent to more than 90 per cent of the herds. It is spread from one cow to another principally by the ingestion of infected material from fetuses aborted in the field. The pregnant cow so infected will usually abort two or three times, each abortion occurring later in the succeeding pregnancies until a third or fourth pregnancy may produce a weakling calf born at term; subsequently the cow seems to be immune and normal calves are born. After the abortions the abortus bacilli are found in the cow's udder and in the milk for periods varying from one to six months.

The frequent occurrence of Brucella abortus in market milk has been shown in several investigations. In 1911 Schroeder and Cotton demonstrated by cultural and animal inoculation methods that the micro-organisms were present in 10 per cent of 77 market milk samples, and in the milk from six of 31 dairies they inspected. Fleischner in 1917 found the organisms in practically all certified milk samples in the San Francisco bay region. Carpenter and Baker in 1927 reported that 18 per cent of mixed milk samples from 50 herds supplying the city of Ithaca, New York, contained Brucella abortus. Carpenter and King state that "a survey of the raw milk supplied to 67 towns, 2 small cities and one city of 200,000 population showed the presence of Brucella abortus in 20.4 per cent of the samples examined." By blood serum agglutinin studies it has been shown that in Connecticut 90 per cent of the herds are infected and in Pennsylvania 85 per cent. Fitch and Lubbhusen in 1924 found that 29 per cent of the cows they examined that had positive serum agglutination tests against abortus antigen (titer 1:100 or above) had the abortus bacilli in their milk. Due to the difficulty of growing these micro-organisms they are never included in the ordinary bacteria counts and consequently certified raw milk of exceptionally low bacterial count may actually be teeming with the abortus bacilli. Cultural methods may fail entirely and their presence may be demonstrated only by animal inoculation.

Even after Alice Evans' work in 1918 showed the close relationship between the two types of micro-organisms little attention was paid to the possibility of human infection with the Brucella abortus and it was thought that the important difference between this and the melitensis variety was the fact that the abortus strains were not pathogenic for man. As late as 1923 Nicolle, Conseil, and Burnet injected five volunteer men with a culture of abortus bacilli and reported that no ill results followed. Since Keefer's case in 1924, however, the actual frequency of human infection with Brucella abortus is being better appreciated. Even in the regions where Malta fever is endemic it is said that this disease is frequently misdiagnosed as typhoid fever, malaria, tuberculosis, or rheumatic fever, and realizing this fact it is easier to understand why many cases may go unrecognized in our own region where such a disease is not suspected. Moreover, undulant fever due to the abortus bacilli follows an even less constant or characteristic course than that due to the melitensis variety.

The clinical course of these cases of undulant fever due to the abortus organism has been variable; the onset may be sudden or gradual, beginning with the symptoms of general malaise, fever, marked fatigue, muscle pains, severe headache, insomnia, chills and profuse night sweats. The course of the temperature is less undulant than in true Malta fever, but in the most characteristic cases there are waves of irregular febrile reaction lasting two to ten days, with sudden or gradual subsidence to normal and remissions of two to seven days, during which time the patient is almost free from subjective symptoms. Gastrointestinal symptoms are infrequent, but marked loss of appetite and severe vomiting may occur. During the waves of fever chills are frequent and sometimes severe, particularly during the initial one or two waves of fever.

During convalescence there occur drenching night sweats unattended by chills. Joint symptoms are of frequent appearance, with pain in the hands and feet, shoulders, hips, ankles, and occasionally an excruciatingly painful spondylitis, which has been in several instances misdiagnosed as due to tuberculosis. This syondylitis is reported by Roger as of fairly frequent occurrence in Malta fever and he emphasizes the fact that chronic arthritides following this disease are commonly observed and usually not related by the attending physicians to the antecedent infection. Violent arthritis may follow an attack of the disease which was so mild as to pass unrecognized. Roger's observations may well lead us to believe that some cases of arthritis and so-called rheumatism seen in this country may be due to Brucella abortus infections which are passing unnoticed. Neuritis is common, and one case is reported as beginning with symptoms of acute sciatica. Scott and Saphir, 1928, reported the finding of Brucella abortus in the blood culture of a man suffering with acute endocarditis and at autopsy the organism was cultured from the vegetations on the endocardium and heart valves.

Since the course is so variable, the infection may at least be suspected in almost any case where there is continued fever and where typhoid, or other more common infection has been ruled out. The diagnosis depends principally upon blood culture and serum agglutination reactions. Serum agglutination is usually definite, and the agglutination titer of a patient's serum may be as high as 1:2,500 or higher. In the Malta fever countries any serum agglutination titer above

1:160 is usually taken to indicate active infection. After the acute course of the disease the agglutinins may occasionally totally disappear from the serum in an astonishingly short time and no agglutination be obtained two months after the patient's temperature has fallen to normal. Also, in certain exceptional cases it is reported that even when the organism was cultured from the blood the patients never had demonstrable agglutinins. This is analogous to the frequent observation in cows in which the bacilli have been cultured from both the blood and the milk when the cow's blood serum showed no power of agglutination. Naturally, since this is true the diagnosis becomes even more difficult. Burnet has recently been using an intradermal test with "melitine", an extract of Brucella melitensis, for the diagnosis of Malta fever and this might afford further assistance in the diagnosis of abortus infections, but so far as I know, it has not been tried in this country, except tentatively by Fleischner in 1918.

Several investigations have been directed toward determining how prevalent the infection may be in persons not suspected of having the disease. Alice Evans in 1924, tested 500 serums submitted for Wassermann test and found that 11.8 per cent reacted positively in dilutions 1:5 to 1:40; one patient whose serum gave agglutination at a dilution of 1:320 gave a history of having drunk raw milk. Hull and Black in 1927, reported that among 69 specimens of blood from patients in whom typhoid was suspected but who consistently gave negative Widal tests, five serums gave positive serum agglutination reactions for Brucella abortus at 1:200 to 1:500. Litterer, in Tennessee, examined 1,200 serums submitted for Wassermann test and found 1.08 per cent agglutinating Brucella abortus. Carpenter and Chapman examined 4,050 blood samples submitted for routine Wassermann test to the Bureau of Health laboratories at Syracuse, New York, and found that 7.3 per cent of the samples contained abortus agglutinins. In Massachusetts Dr. M. J. King examined the serums from 690 patients in three state sanatoriums where only pasteurized milk was used and found not a single specimen showing these agglutinins, whereas in the Mt. McGregor, New York sanatorium where raw certified milk was used (54 per cent of the cows in the herd infected with Brucella abortus) 13 per cent of the 530 patients and staff showed agglutinins in their serums.

One case of abortus infection in a woman with uterine inflammation accompanied by chills and fever, has been reported by Belyea in 1927, and it is noteworthy that ammenorrhea and occasionally abortions are reported as sequellae of Malta fever in women. Larson and Sedgwick, in 1913, found that a considerable number of serums from aborting women gave positive complement fixation tests toward the abortus bacillus, but two other investigators have failed to confirm their findings; in viewing these results, of course, we must remember that an infection may be occurring in one community and not encountered at all in another. It has been stated without definite data by two writers, that farmers' wives occasionally abort when infectious abortion is prevalent in their herds.

There have been two attempts to see whether the tonsils may harbor Brucella abortus and constitute foci of infection responsible for protracted chronic disease. Mohler and Traum injected material from 56 pairs of tonsils and adenoids into guinea-pigs and one animal developed lesions from which abortus bacilli were isolated. Similarly, Carpenter recently reported that of 55 pairs of tonsils injected into guinea-pigs seven animals were infected with Brucella abortus (cited by Sensenich and Giordano).

My own active interest in this problem began with a speculation as to whether the Brucella abortus, so commonly existing in cow's milk, could be causing active disease in infants and children for whom milk constitutes the most important part of the diet. Since the cases are occurring in considerable numbers in older persons it seems that we should expect the disease even more often among children. In viewing the varying manifestations of the disease in adults, we may surmise that this micro-organism might be the exciting agent in a number of acute and chronic nutritional disturbances in which we are now unable to indict any specific cause. Common failure of recognition of the infection would be expected considering the difficulty in growing the organism in blood cultures, the fact that fewer blood cultures are made in infancy, and that the serum agglutination test, while the most reliable diagnostic procedure at our disposal, is not infallible.

Among the 155 cases collected by Carpenter and King there were only two in children younger than six years. In a personal communication Dr. A. V. Hardy of the State Hygienic Laboratories, Iowa City, has written of four cases between six and ten years of age and of eight others under fifteen years. Sedgwick and Larson investigated this question in 1915 before the first human cases of abortus infection had been discovered. They tested the blood serums of 425 institutional children and found that 17 per cent of them reacted positively. In one institution supplied with milk from a clean herd no positive reactions were discovered, while in an institution supplied with milk from a herd in which infectious abortion was known to exist 48 per cent of the children gave positive reactions. Ramsey, in 1915, examined the blood of 58 children and found seven positive serum reactions. In the Children's Hospital of Boston, I examined more than 250 children's serums, submitted for the Wassermann test, for Brucella abortus agglutinins and only one

specimen reacted positively through dilutions to 1:40. In the Children's Hospital of Cincinnati one girl thirteen years of age with a diagnosis of endocarditis had a temperature course simulating that seen in undulant fever. Her serum agglutinated Brucella abortus completely at 1:80 and partially at 1:160. It is uncertain what significance can be given such a finding without further evidence. Cultures of her blood repeatedly gave no bacterial growth, and she is now practically recovered from whatever infection she had.

Many persons who are most familiar with the human abortus infections which have been observed have stated their impression that infants are apparently immune from the disease. This may be true, but Malta fever is said to be recognized rarely in infants even in the countries where the disease is endemic and clinicians are more familiar with the symptoms, and in those countries there is also general belief that infants are immune from this disease. Camous and others have, however, shown that this is not true and they report a number of cases in nurslings, who they state frequently have the disease, but it passes undiagnosed, both because of failure to make proper laboratory examinations and because of difficulty in recognition of clinical symptoms in infants.

The principal purpose of this present discussion is to emphasize that we have in the Brucella abortus a micro-organism which has an enormously wide distribution in raw market milk and which, contrary to past belief, may constitute an important health hazard. While the cases thus far reported are in adults, with none at all discovered in nurslings, it is by no means as yet proved that infants are immune and I believe that pediatricians should be on the look-out for the infection. It may be that while not often producing an acute severe disease in infants, Brucella abortus may be a frequent cause of milder acute and chronic illness in infants who drink raw milk, and that this agent may be responsible for some forms of mild generalized lymphadenopathy, splenic enlargement and mild anemia, the cause of which we so often fail to understand.

CHILDREN'S HOSPITAL.

DISCUSSION

M. E. BARNES, M.D., Greenville: Dr. Guest has called attention to the reported prevalence of Bacilli abortus infection among cattle. In this connection the experience in Darke County should be of interest, as it is probably typical of general conditions throughout the state. In investigating the sources of infection of the ten human cases thus far proved, we tested the blood of every cow in the herds supplying Grade A raw milk to the city of Greenville. Of a total of 50 cows thus tested, 49 showed that they now have or have recently had this infection. The blood agglutinated Bacilli abortus in dilutions ranging from 1:40 to 1:2560. The organism was isolated from the milk in one out of seven cows tested. The laboratory work was done by Doctor Walter Simpson of Dayton.

This wide-spread infection among cows raises the interesting question as to why there are not more human cases. There are several possibilities to be considered: First, there may be a relatively high natural or a general immunity acquired among human beings to the infection. Second, it may be that only a small percentage of infected cows actually remain carriers, e.g. 14 per cent of the seven tested showed the organism in the milk. If this should prove to be the case, dilution of the milk from carriers with non-infected raw milk would lessen the danger of the users getting a sufficient dosage to initiate the disease. Third, the possibility exists that numerous human cases are overlooked. The cases we have had have been mistaken for other diseases. Thus our most recent case was considered influenza by the first physician, "intestinal influenza" by the second physician, and undulant fever by the third physician. Other cases have been suspected of being typhoid fever, paratyphoid fever, malaria, rheumatism, or early tuberculosis. Blood examination is necessary for a positive diagnosis. In this connection, the dried smears such as are used for Widal examinations are not at all satisfactory. Blood serum such as is submitted for Wassermann tests should be used.

Pasteurization of milk is a sure preventive of spread of the disease via the milk supply. However, this must be understood to include all dairy products. Butter, buttermilk, cottage cheese and possibly ice cream, unless made from pasteurized ingredients, may convey the disease.

PAUL F. ORR, M.D., Toledo: The following remarks upon the subject of Dr. Guest's paper are based upon a personal study of thirty cases of undulant fever in man which occurred in the State of Michigan during the past three years.

There remains much to be learned about the question of *Brucella abortus* infection in man, and one of the outstanding questions is why more cases of this disease have not been observed in children? Relatively few cases have been reported in which the patient was under ten years of age. It is impossible to say whether this is due to the fact that most of the cases in the younger age groups have not been diagnosed, or whether the infection rarely occurs among children.

In our own experience only one of the thirty cases was under ten years of age, the next youngest being fifteen. The preponderance of reports indicate that man contracts undulant fever in most cases through the drinking of raw milk infected with *Brucella abortus*, and on this basis one would suspect that more cases of undulant fever would occur in the younger age groups.

The work of Hardy in Iowa, and a few other workers, would indicate that apparently some cases of infection in man are traceable to contact with hogs. However, the extensive work of Carpenter in New York indicates rather definitely that at least in that district the source of infection is through the consumption of raw infected milk. Our experience in Michigan agrees with that of Carpenter.

One of the outstanding points to be kept in mind in making a diagnosis of undulant fever is the fact that the physical examination may be essentially negative. There are no constant physical findings which are to be found. Clinical diagnosis must be based largely on symptomatology backed up by clinical pathology.

Our cases fall into three different types: 1. Ambulatory; 2. Recurrent; 3. Non-recurrent. We have seen a few cases which are classified as ambulatory inasmuch as the symptoms were very mild, and at no time was the patient necessarily confined to bed. The second or recurrent type is

the typical text book picture of Malta Fever, in which recurrent attacks last from five days to two or three weeks with periods of remission. We have followed cases of this type in which the recurrent symptoms have extended over a period of a year or more. At first the attacks are of longer duration and the remission of only a few days duration. As the disease progresses the length of the remission increases, while the attacks become milder and of shorter duration.

The third or non-recurrent type includes the largest per cent of our cases. This type runs a continuous fever with diurnal variation for a period of two to three months. Recovery is slow in this type but the attacks do not recur.

In our experience the outstanding symptoms which may aid in arriving at a diagnosis are, first, a diurnal variation in temperature. The maximum temperature of 102 to 103 or even 103.8 is usually reached during the late afternoon or evening, while in the morning the temperature drops to perhaps 99 to 100.

The second outstanding feature with regard to symptoms is the fact that the patients at no time appear seriously ill in spite of the high temperature or of the long duration of the disease, whereas, a patient with typhoid fever has the appearance commonly described as the typhoid state.

The undulant fever patient appears markedly well and feels well enough each morning to sit up and be about.

Rigors occurring daily, especially in the evening, are common. However, the patient may only experience a chilly sensation. Profuse sweating occurring usually at night is quite characteristic in this disease and our observations indicate that patients complain of the perspiration being extremely odoriferous.

In our experience nervousness has been an outstanding feature in practically all of the cases so much that in some patients a diagnosis of hyperthyroidism had been previously made.

Clinical diagnosis should be confirmed by laboratory examinations. After the first week of illness the agglutination titer as a rule runs from 1: 320 to 1: 1000. In some instances we have obtained a much higher titer reaching 1 to 20,000 in one case.

Positive results in cultivating Brucella abortus from the patient's blood have only been obtained in a relatively small percentage of individuals, due to the difficulty of growing the organism. In our series we were successful in culturing the organism in approximately 50 per cent of the cases.

REFERENCES

Bang, B., Ztschr. f. Thiermed. Jena, 1897, 1:241.
Belyea, G. N., J.A.M.A., 1927, 88: 1482.
Bruce, David, The Practitioner, London, 1887, 39: 161.
Carpenter, C. M., Baker, R., Cornell Vet., 1927, 17: 236.
Carpenter, C. M. and Boak, R., Am. J. Pub. Health, 1928, 18: 743.
Carpenter and Chapman, J. Immun., 1929, 17:65.
Evans, A. C., J. Inf. Dis., 1918, 22: 580.
Pub. Health Reports, Washington, 1924, 39: 501. J.A.M.A., 1927, 88: 630.
Fitch, C. P., Lubbehusen, R. E., Cornel Vet., 1924, 14: 299.
Fleischner, E. C., Myer, K. F., Am. J. Dis. Chil., 1918, 16: 268.
Hull, T. G., Black, L. A., J.A.M.A., 1927, 88: 463.
Kern, R. A., Am. J. Med. Sc, 1928, 176: 405.
Larson and Sedgwick, Am. J. Dis. Chil., 1913, 6: 326.
Litterer, W., J.A.M.A., 1928, 90: 1590.
Mohler, Traum, 28th Ann. Report Bur. An. Indust., 1911, p. 147.
Nicolle, C., Burnet, E., Conseil, E., Compt. rend. Ac. Sc., 1923, 176: 1034.
Ramsey, Am. J. Dis. Chil., 1915, 10: 201.
Roger, H., Presse med., 1926, 34: 929.
Schroeder and Cotton, 28th Ann. Report of Bur. An. Indust., 1911, p. 139.
Scott, R. W. and Saphir, O., Am. J. M. Sc., 1928, 175; 66.
Sedgwick, J. P., Larson, W. P., Am. J. Dis. Chil., 1915, 10: 197.
Sensenich, R. L. and Giordano, A. S., J.A.M.A., 1928, 90: 1782.
Smith, T., J. Exp. Med., 1926, 43: 207.
Wilson, G. S., Nutt, M. M., J. Path. and Bact., 1926, 29: 141.

Undulant Fever In Ohio

Prepared by the Divisions of Laboratories and Communicable Diseases of the Ohio Department of Health.

THIS disease has been known for many centuries and under various names along the shores and throughout the eastern islands of the Mediterranean Sea. Bruce, sent to the island of Malta by the British government in 1887, discovered the causative organism which he named "*micrococcus melitensis.*" The name Malta fever was given the disease.

In 1897, Capt. M. L. Hughes of the British Army Medical Staff proposed the name "Undulant Fever" because of the wave-like temperature curve of the disease. This term has been adopted universally for the disease in man, since it not only is descriptive but does away with any chance of the mistaken idea that true undulant fever is confined to the island of Malta.

In 1905, in a report of the first case recorded as originating in the United States, Craig[1] stated: "I am convinced that a careful study, by use of the Widal test and the agglutination reaction with *micrococcus melitensis*, of the many cases of obscure continued fevers which are prevalent in this country will result in the demonstration that Malta fever is by no means a rare disease in the warmer portions of the United States, and that many of the so-called anomalous cases of typhoid fever are in reality instances of infection with the organism of Malta fever".

It was suggested by Larson and Sedgwick[2] in 1913, that the causative organism of abortive disease in cattle, *Brucella abortus* of Bangs, might be pathogenic for man.

Great credit is due Alice C. Evans[3], bacteriologist of the U. S. Public Health Service, for having presented the first substantiating evidence of the pathogenicity of *Brucella abortus* for man in 1918. Her laboratory experiments proved that *Brucella abortus* and *Brucella melitensis* are so closely related as to be considered as belonging to the same bacterial species. Her results have been repeatedly corroborated by other investigators. In this country it may be truly said that her observations introduced a new era as regards undulant fever.

In 1926, Carpenter and Merriam[4] reported two cases of typical undulant fever in which they

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had isolated *Brucella abortus* from the patients' blood and from the cows' milk consumed by one of the patients.

Brucella abortus infection has been found to be widespread among dairy cattle, and, as from 20 to 80 per cent of cattle that abort continue to eliminate the organism in their milk throughout their lifetime, undulant fever has become a definite and highly important public health problem.

Laboratories are everywhere energetically doing investigative and experimental work, and the accumulated evidence shows an ever-increasing number of undulant fever cases, and an ever-widening area of bovine infection. Hardy has collected data on over 1000 cases in this country, most of which have been recognized during the past three years. Work in this disease began in our laboratory following a conference in November, 1927, between Dr. Walter M. Simpson, Director of the Diagnostic Laboratories of the Miami Valley Hospital, Dayton, and Mr. Fred Berry, then Chief of the Laboratories.

Early in 1928, our laboratories began routine examination for undulant fever in all negative or partially positive Widals. For many years, in fact ever since the Widal test has become an important adjunct in the diagnosis of typhoid fever, dried blood specimens have been used for laboratory examinations. We now know, however, that with dried blood specimens the agglutination test must not be considered as wholly conclusive or absolutely reliable, and all laboratories are now urgently requesting fresh and wet specimens for diagnostic work. This applies to all agglutination tests and all physicians are urged to use the Wassermann and Kahn blood tubes in collecting specimens in suspected cases of undulant fever.

It may be well to give a general outline of the disease before proceeding with our study of cases. It will be but a brief summary because the subject has been so thoroughly presented in recent literature by Simpson[5], Evans, Hardy[6] and Huddleson[7].

ETIOLOGY

Micrococcus melitensis Bruce is a small coccus or cocco-bacillus, Gram-negative, non-motile, and occasionally growing in pairs or short chains. It can be cultivated on suitable media, but its growth is slow. It is found in the kidneys, liver, spleen, lymphatics, the blood, bile, urine, salivary glands, and in the milk of infected animals. At one time believed to be a delicate organism, recent investigations have shown that the bacterium can live for a long time in water, in dust, or on the clothes of patients, and that it is not killed by cold or desiccation.

Manson[8] states: "Of all infections, undulant fever is the most readily acquired in the laboratory from handling cultures." Five bacteriologists of the U. S. Public Health Service have contracted the disease while doing research work, within the past few years.

Brucella abortus, while practically identical with *Brucella melitensis* in biological characteristics, and causing the same symptoms in man, is not so virulent under cultivation.

SYMPTOMS AND COURSE OF THE DISEASE

Incubation period: Following this uncertain period, but usually of ten to twelve days duration, the patient complains of malaise, chills, headache, back-ache, muscular pains, dyspepsia, insomnia and mental depression.

Varieties: Four varieties of the disease are recognized:

(1) In a *typical case* the temperature rises, step-like, just a little higher on each successive night—falling a little in the morning—until it reaches about 103 to 105 degrees Fahrenheit. Profuse night sweats are characteristic. These generally occur between two and four A. M. There is little change for one to four weeks, then the temperature gradually declines, and by another fortnight may have reached normal, or even subnormal, only to rise again in a relapse after a few days. In the interval between attacks of fever, the patient may feel a little weakened, but otherwise normal. As these recurrences continue—they may last for a year or more—there is a marked anemia, functional cardiac murmurs develop, and various skin lesions may appear. There is loss of weight, prostration may be extreme, and the patient becomes greatly depressed.

(2) The *malignant type* sets in suddenly. The temperature abruptly rises to 102 degrees Fahrenheit or higher. There is severe headache; there are acute, generalized muscular pains; vomiting frequently occurs. There may be a basal pneumonia. After a few days, a typhoid-like condition supervenes and death occurs from cardiac failure one to three weeks from the date of onset.

(3) The *intermittent type* is gradual in onset, and mild in its course. The fever is low, and the patient may be unaware that he is suffering from anything unusual, although he knows he is not quite normal, for he has malaise, possibly some slight chills, some nervous irritability, and night sweats. These successive attacks, drawn out through many weeks or months gradually debilitate him; he is weak and depressed, and is very apt to fall an easy victim to any intercurrent infection.

(4) The *ambulatory type* is still more benign. The patient may occasionally experience slight fever, and may complain of an unaccountable weakness. These may be his only symptoms. The organism, however, is present in his blood, it may be in his sputum and excreta.

DIAGNOSIS: CLINICAL

Early diagnosis of even a typical case presents difficulties, for until some outstanding symptom arises, such as the characteristic night sweat, the

course and symptoms of undulant fever simulate the beginning stages of many other infectious diseases. The daily irregularity of temperature may be a guide. Difficulty in diagnosis may be appreciated when we state that one of the cases among the thirty-five in our series was operated upon for appendicitis, and one for gallstones, and another was being prepared for a similar operation when the real cause of his illness was discovered.

Two of our patients were man and wife; the husband, aged 56, a farmer, gave a history of onset of illness on April 23, 1929; the wife, aged 44, developed the first symptoms on June 21, 1929. Both showed agglutination in high titre.

Another very interesting case is that of Mr. G. D.D., an exhibitor of Jersey cattle. Among a carload of cattle he was taking to Utah, was a heifer he had purchased in Kentucky on July 6, 1928. Before reaching Chicago this heifer passed a large amount of after-birth. He treated her several times with hot water and lysol solution. He slept in a bunk in the car, but in Wyoming the cold became so intense that he wrapped his blanket about him and lay down in the stall with the heifer. In Ogden, Utah, about ten days later, he became very ill and was taken to the hospital. The attack lasted five weeks. He came back to Ohio in the middle of August, and remained in a greatly weakened condition until a second attack occurred in November. This attack lasted until April, 1929. His physician thought he had typhoid until a blood examination was made.

Diagnosis should be reserved in all those conditions with indefinite or seemingly conflicting symptoms, until a blood test is made.

Usually blood for testing should not be taken before the second week of the disease, although the reaction has been found as early as the fifth day.

A skin test using a suspension of killed abortus organisms, while still in the experimental stage, gives promise of being of invaluable service in showing the presence or absence of infection.

DIAGNOSIS: LABORATORY

It is safe to say that in no other infection or transmissible disease of known origin has the aid of the laboratory been sought with greater eagerness for confirmation or the establishment of a diagnosis as has been the case with the agglutination test for undulant fever. Since the relation of *Brucella abortus* infection in animals has been linked with the disease in man, the agglutination test has been adopted as a routine procedure in most of the state and city health laboratories and in many private laboratories.

As early as 1897, Wright and Semple introduced the agglutination method of detecting undulant fever infection in man and while many workers experimented with the method, it was Alice Evans who finally perfected and developed a reliable macroscopic technique which is used almost universally today. It should be emphasized here that the cases reported in this paper were discovered, not by the isolation of organisms in milk or in blood, but by the use of the simple agglutination test of the patient's blood serum. It requires at least three to five cc. and as stated previously, we advise against dried blood for any agglutination test. The specimen should be collected exactly as for the Wassermann and Kahn tests and the same outfit may be used for this purpose.

In typical typhoid cases it is believed that the laboratory agglutination fails to agree with the clinical diagnosis in approximately five per cent of the cases. What the percentage is or to what extent this condition exists in undulant fever is not definitely known. We do know, however, from our experiences that there are and have been clinical cases of undulant fever which responded negatively to the agglutination test. In a great majority of cases, agglutinins do not appear during the first or second week of illness so that blood ought not be examined until after the first or second week.

Our records show that the shortest time intervening from date of onset until a first specimen was examined numbered only four days. A titre of 1:1280 was found and eight months later the titre dropped to 1:80. The longest period was found to be three years, and the first specimen agglutinated in dilution up to 1:160. This patient happened to be a veterinarian. The highest titre found in our experience was in dilution of 1:10240, after the 50th day of illness. Titres above 1:80 have been quite generally accepted by clinicians as fairly diagnostic of the disease, but there is some question what significance should be attached to the lower dilutions. In this group of thirty-five cases, only one was definitely diagnosed as undulant fever on the basis of a 1:40 dilution. This result, however, was not determined until two months following the onset of illness. Specimens showing low dilutions 1:10 or 1:20, we report as suggestive, unless the patient shows a well-defined clinical picture of the disease in which event we regard the finding as highly significant.

COMPLICATIONS AND SEQUELAE

Manson[5] states: "As a rule, by far the most serious consequences of undulant fever are the debility it entails, the emaciation, the profound anemia, the rheumatic-like pains, the neuralgias and such sequelae as abscess, orchitis, mastitis, parotitis, boils, etc." An attack often leaves a patient with an extreme atrophy of the muscles, and in a state of general invalidism in which susceptibility to tuberculosis is greatly enhanced.

PROGNOSIS

No definite statement can be made as to the duration of an attack, yet "when the pyrexia has

subsided for more than ten days and the patient's tongue is clean and his appetite good, no further relapses may be expected" (Manson). The mortality rate is from 2 to 6 per cent. One of our patients died after an illness lasting from July 31 to August 5, 1928.

TREATMENT

There have been many conflicting reports as to the efficacy of the many remedies used in treating undulant fever. A specific treatment is not yet available. Vaccines have been employed with encouraging results in a number of cases. Symptomatic treatment seems to be our best method until something better is evolved.

There were eleven cases of undulant fever reported to the State Department of Health during 1928; and up to November 15, sixty-five cases during 1929.

The present study is of thirty-five active cases. Sixteen of these were diagnosed from dried blood specimens. Many of them were sent in for the Widal reaction and would probably have been unrecognized as undulant fever had there been no laboratory check-up on the presence or absence of antiabortus agglutinins. Many other cases were found with lower dilutions (1:10-1:40). These were not investigated because of the rapid subsidence of symptoms showing either mildness of attack or that they were possibly old cases with waning symptoms.

Each of these thirty-five cases has been personally investigated, and has had at least two confirmatory tests.

Distribution of cases: The cases selected were scattered in twenty-four counties and in practically every section of the State. The farm, the small town, and village supplied nineteen, and of the remaining cases, four had handled cattle in some manner. Another of these sixteen was a rural mail carrier, and one a saleslady traveling to small towns.

Distribution by occupation: Fifteen of those infected were engaged in occupations which required more or less direct contact with livestock, meats, the dairy, or dairy products. Among these were ten farmers, farmer's wives or some member of a farmer's family; two were butchers, one a dairyman, one a veterinarian, and one a stock buyer.

Use of Milk: Twenty-nine of these patients were consumers of raw milk; nine of these used milk from known infected herds. The source of the infection could not be ascertained in twenty cases. Five individuals claimed to use pasteurized milk only. One of these was a stock buyer, one a butcher, one a housewife, and one a hospital domestic in an institution supplied with milk from a herd known to have had abortion among the cattle for the past ten years.

Age and Sex: There were twenty males and fifteen females. The greatest number of cases in any age group was ten, in the decade from thirty to thirty-nine. Six of these were males, four were females. Age groups 20 to 29, 40 to 49, and 50 to 59 each supplied seven cases. No cases were found under ten years of age, and but one between ten and nineteen. Three were found in persons over sixty.

Character of onset: Five males and four females gave a history of an onset of less than one week; three males and four females of from one to two weeks. There were thirteen cases ranging in time of onset from two to seven weeks. Two gave a history of prodromes prolonged over a period of three months. Most of these with an extended time of onset complained of general lassitude, and, more especially, of so easily tiring at their usual occupation, but stated that they had had no pronounced or definite symptoms until the development of headaches, fever and sweats.

Symptoms and complaints: All but one of the thirty-five gave a history of weakness and fever. Thirty-two had headache and sweats; thirty-one had chills or chilliness. Only five of the thirty-five did not lose weight. The majority lost ten pounds or more, three gave a loss of thirty, twenty-three, and twenty pounds.

Twenty-nine had loss of appetite. Constipation was the next most common symptom; twenty-eight suffered from it. Other symptoms in their numerical order of frequency were: backache, 26, rigors, 23, abdominal pain, 19, insomnia and nausea, each 18, vomiting, 12, cough, 8, and swelling of the joints, 3.

SUMMARY AND CONCLUSIONS

(1) This report covers thirty-five cases of undulant fever which have been diagnosed clinically and serologically. Since this investigation was undertaken, the number of cases has increased to sixty-six. (These figures exclude the 63 cases previously reported by Dr. Walter M. Simpson of Dayton).

(2) Previous to the routine adoption of examining all negative and partially positive Widals in this laboratory, physicians very seldom requested an agglutination test for undulant fever. Today such requests are numerous.

(3) With the greatly increased number of cases reported in Ohio, as well as all over the United States, undulant fever constitutes one of our major public health problems.

(4) Although the ingestion of raw milk and unpasteurized dairy products is considered the most frequent etiological factor in this disease, in seven of our cases there was a definite history of the disease following contact with aborting cattle and one following the shearing of infected goats.

(5) The farm, village and small town without question supply the greater number of undulant fever cases, because of the use of milk and dairy products which have not been pasteurized.

DISCUSSION

WALTER M. SIMPSON, M.D., Dayton, Ohio: Last year at this time Doctor Edward Francis, of the United States Public Health Service, whose researches in tularemia have brought him undying fame, addressed this conference on the subject of "Undulant Fever". Doctor Francis delivered that lecture with a fever of 102°. He was at that moment suffering from the first manifestations of undulant fever which he had acquired in his laboratory. Probably most of you know that he went immediately from Columbus to the Naval Hospital at Washington where he remained bedfast for several months.

Undulant fever can no longer be regarded as a rare disease of man. During the past one and one-half years, I have personally investigated 83 confirmed cases which have occurred in and about Dayton. Orr and Huddleson have reported 36 cases from Michigan. Sensenich and Giordano have reported 35 cases from South Bend. Farbar and Mathews have described an epidemic involving 25 students and one laundress at Earlham College, Richmond, Indiana. Hardy discovered 125 cases during one year in Iowa. These experiences indicate that the disease is invariably found to be widespread when an individual makes a concentrated investigation of the incidence of the disease in a given locality. Over 1000 cases have been discovered in this country during the past 18 months.

Public health officials have become acutely aware of the importance of this disease as a public health problem. It was stated at the League of Nations Health Conference in 1928, that undulant fever is unquestionably the most important problem now facing public health workers.

Much might be said about the historical development of our present-day knowledge of this disease. It will suffice to say that it has been proved beyond question of doubt that the organism that produces contagious abortion in cattle and other domestic animals (Brucella abortus) is capable of producing in human beings a disease clinically, bacteriologically, biochemically and serologically identical with the Mediterranean type of Malta fever, usually attributed to the ingestion of goat's milk.

Contagious abortion is widely prevalent among cattle in this country. It has been stated that 90 per cent of the herds of Connecticut are infected. In Pennsylvania less than 14 per cent of herds are free of the infection. I have been informed by veterinarians that practically no large herd is free of this infection. Our own experiences lead us to conclude that contagious abortion is widely prevalent in southern Ohio. The blood of 92 cattle, including four calves and three bulls, of herds supplying raw milk to patients in the Dayton series of cases, has been tested in our laboratory. The three bulls and 76 (82 per cent) of the cows gave positive serological evidence of Brucella abortus infection. The four calves gave negative reactions. This relative immunity of calves has been well known to veterinarians for many years. The relative immunity of infants to undulant fever seems to parallel the relative immunity of calves. Eight of the reactors among the cows were found to be eliminating Brucella abortus in large numbers in their milk. These organisms were found to be serologically identical with the strains of Brucella abortus which were recovered from the blood of five patients who were suffering acutely from undulant fever. Four strains of Brucella abortus, one from human blood and three from cow's milk, were submitted to Huddleson who also found them to be of the bovine type. We encountered no cases of direct porcine or caprine origin. Our experience lends no support to the belief of some investigators that the porcine rather than the bovine variety of Brucella abortus is the usual cause of undulant fever in this country, even though one cannot deny the possibility of the transmission of the porcine variety to cows and thence to man.

Mr. Ey has emphasized the essential clinical manifestations of the disease as it occurs in man. It has been repeatedly stated that undulant fever produces no well-defined clinical picture and that the diagnosis is made with great difficulty. Our experience has not been in accord with this widely accepted belief. In over one-third of the Dayton cases an initial clinical diagnosis of undulant fever has been made by several physicians. The outstanding features of the disease are the gradual development of afternoon or evening fever, usually associated with chills and nocturnal perspiration and accompanied by more or less weakness. The patient usually becomes vaguely aware of the development of an afternoon or evening rise of temperature associated with headache, backache and pains in the muscles, joints and extremities. The general appearance of the patient frequently belies the objective clinical findings. In many instances the patient is not greatly incapacitated by his illness and the physician is surprised to find a temperature of 101° to 102° F. Relapses, with febrile undulations, were uncommon among our patients, having occurred in only seven instances. Occasionally the disease is mild and the patient is able to continue with his work. Loss of body weight is an almost constant finding; many of our patients lost from 25 to 60 pounds.

In about 10 per cent of our cases joint symptoms were an outstanding feature of the disease and in three instances led to an initial clinical diagnosis of acute rheumatic fever. Abdominal pain appeared to dominate the clinical picture in 11 of our cases. In three cases of sudden right lower quadrant pain with fever, appendectomy was performed; in one instance a gangrenous appendix was found; in the other two normal appendices were removed. Cholecystectomy was seriously considered in another case because of the development of sharp upper right quadrant pain associated with fever, chills and sweats.

Brucella abortus has a peculiar predilection to the genital tract of cattle. There is convincing evidence that the same selectivity occurs in human beings. In the bull the infection frequently produces seminal vesiculitis and orchitis. In guinea pigs which are inoculated with Brucella abortus, orchitis is a common result. Three of our male patients were first examined by genito-urinary surgeons who found clinical evidence of seminal vesiculitis, prostatitis, epididymitis and orchitis. All three denied exposure to gonococcal infection and repeated smears made from urethral discharges after prostatic massage revealed no gram-negative diplococci. The sera of the three men was found to agglutinate Brucella abortus in dilutions from 1:160 to 1:640. Brucella abortus was recovered in one of the cases from a draining sinus tract which extended from the globus major of the epididymis through the scrotal wall. Two of these patients were constant consumers of raw milk; the third drank raw milk occasionally and used unpasteurized country butter in his home.

The causative organism derives its name (Brucella abortus or organism of contagious abortion) from its etiologic association with abortion in cattle and other domestic animals. It seems reasonable to expect that the organism

might have a similar effect in pregnant women. We have encountered five cases in which women who have repeatedly aborted and who presented no clinical or serological evidence of syphilis, gave serological evidence of previous infection with Brucella abortus. All were raw milk consumers. Carpenter has recently isolated Brucella abortus from human fetal tissues in a case of abortion. Brucella abortus has been isolated from a tubo-ovarian abscess which developed as a late complication in a case of known undulant fever. These findings open a new field of investigation in cases of human abortion.

A skin eruption has occurred in about 5 per cent of cases, usually taking the form of red macular scaling lesions. These may appear on the abdomen and simulate the roseola of typhoid fever. To further confuse the disease with typhoid fever, the spleen is frequently enlarged; palpable splenomegaly occurred in one-third of our cases. The clinical blood findings are of the greatest importance. A mild secondary anemia is usually present, but the most important factor in the blood picture is the almost constant presence of leukopenia, 4,000 to 6,000, with a relative lymphocytosis. The lymphocytosis may exceed 50 per cent.

The most important consideration in the diagnosis of the disease is to include undulant fever in the differential diagnosis in all cases of protracted febrile illness. The disease has been confused most frequently with typhoid fever, malaria, tuberculosis and influenza. Unquestionably many cases of typhoid fever and malaria, in which the clinical diagnosis has not been sustained by laboratory tests, have actually been cases of undulant fever. In many cases the disease pursues a very mild course and might easily be confused with la grippe or influenza. It is also unquestionably true that many persons possess a natural immunity to this disease.

The simplest way to confirm a clinical diagnosis of undulant fever is to submit 4 or 5 cc. of the patient's blood, collected exactly as for the Wassermann test, to the State Health Laboratory. If there is access to a laboratory the organism may be recovered from blood cultures or by animal inoculation. I would again emphasize the inadvisability of submitting dry blood specimens for any agglutination test.

The most important phase of the treatment is prophylaxis. Complete pasteurization of milk destroys the organism and would be the logical means for eliminating milk-borne infection. A few cases of undulant fever have occurred among veterinarians, farmers and meat handlers as the result of direct contact with contaminated fresh tissues.

Since the relationship between the consumption of raw milk of cattle infected with the organism of contagious abortion and the occurrence of undulant fever in human beings has been established, the goal of every public health officer should be universal pasteurization of all dairy products. I must pay a tribute to Doctor William H. Peters, Health Commissioner of Cincinnati, whose efforts in this direction have been rewarded by a universal pasteurization ordinance. He has set the goal which all of us should strive to attain.

REFERENCES

1. Craig, C. F.: International Clinic 4: 89, 1906.

2. Larson, W. P. and Sedgwick, J. P.: The Complement Fixation Reaction of the Blood of Children and Infants Using Brucella Abortus as Antigen. Am. Jour. Dis. Child. 6: 326 (Nov., 1913).

3. Evans, Alice C.: Further Studies on Bacterium Abortus and Related Bacteria. Jour. Infect. Dis. 22: (June 1918).

4. Carpenter, C. M. and Merriam, H. E.: Report of Two Cases. Jour. A.M.A. 87: 1269-1271 (Oct. 16) 1926.

5. Simpson, Walter M. and Bowers, L. G.: Surgical Aspects of Undulant Fever. Am. J. Surg., 1929, 7, 597-604. Simpson, Walter M. and Fraizer, Eunice: Undulant Fever: Report of Sixty-three Cases Occurring In and About Dayton, Ohio. J.A.M.A., 1929, 93, 1958-1965.

6. Hardy, A. V.: Undulant Fever: A Clinical Analysis of One Hundred and Twenty-Five Cases. J.A.M.A., 92, 853, 1929.

7. Huddleson, I. F. and Orr, P. F.: A further Epidemiological Study of Undulant Fever in Michigan. Am. Pub. Health Assoc., Symposium on Undulant Fever, 1929, pp. 34-38.

8. Manson, P. H.: Tropical Diseases. Undulant Fever.

Calcified Thyroid Cyst

Report of Case*

C. M. RAMBO, M.D., and LEO M. LEVI, M.D., Zanesville, Ohio

The following case is presented because of the comparative rarity of the condition. Indeed, a search of the literature for the past ten years reveals but three reported cases, viz., one case each by Pennel[1] in 1917, Clark[2] in 1920, and Arens and Bloom[3] in 1927. Reference to calcification of the thyroid are few. Crotti[4] writes that calcareous deposits may convert a nodular goiter into a hard calcareous lump and Hertzler, though he refers to calcareous shells and plaques, does not mention massive calcification of the capsule.

Jackson[5], DeQuervain[7] and Bartlett[8] merely mention the condition while Kauffman[9] and Plummer[10] intimate that complete calcification of the thyroid or its capsule is extremely infrequent.

To add to the relatively meager list the following case is therefore reported.

Mrs. H. M., age 47, white, housewife, a native of Poland, entered the hospital complaining of progressive dyspnoea. She had first noticed an enlargement in the left side of her neck twenty-two years ago, since which time it had been slowly increasing in size.

The only treatment administered was the application of a liniment by the patient. There were no symptoms of thyroid dysfunction.

The family and past histories were essentially negative. With the exception of the neck, the physical examination was not remarkable.

In the region of the left lobe of the thyroid gland there was a very hard mass, about the size of an orange, which moved slightly on deglutition. The right lobe and isthmus were apparently normal. A tentative diagnosis of calcareous deposits

*From the surgical service of Dr. C. M. Rambo, Good Samaritan Hospital, Zanesville, Ohio.

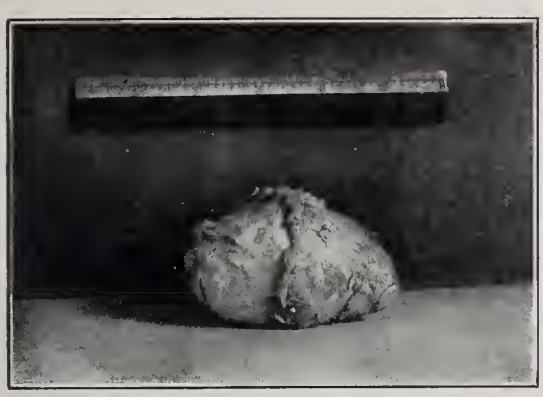


Fig. 1—Showing gross specimen. (Scale in inches.)



Fig. 2—Showing cut surface.

in the left lobe of the thyroid was made and a lobectomy done.

Upon removal the specimen weighed 150 gm. (5 ounces). The pathological examination follows

Macroscopic Examination:—The specimen is a tumor mass measuring 6 by 7 by 9 cm. It is exceedingly dense and bony in texture. It was necessary to use a saw to bisect the specimen and when this was accomplished the wall was found to vary from one to two cm. in thickness. This wall was infiltrated with lime salts but showing no evidence of definite bone formation. It incloses cystic areas, one large, measuring 4 by 5 by .5 cm. and minor cysts each of which are 1 by 1.5 cm. These cysts are lined by a somewhat shining pale white membrane. The contents of the cysts is a thick opalescent, gelatinous fluid. In one single portion of the cyst wall there is a suggestion of gland tissue, the remainder being fibrous and calcified. A portion from this soft tissue was taken for section.

Microscopic Examination:—Sections show an exceedingly dense and fibrous stroma which compresses a few small islands of atrophied but otherwise normal thyroid acini.

Pathological Diagnosis: Calcified Thyroid Cyst—Benign.

An uneventful recovery was made and the patient has remained in good health for two years.



Fig. 3—Anterior view, showing opacity of tumor and deviation of trachea to the right.

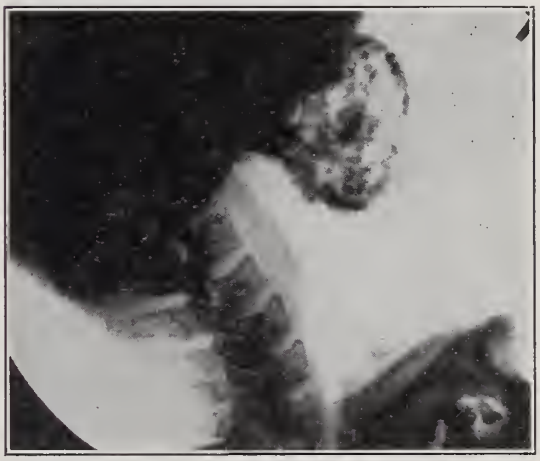


Fig. 4—Lateral view of tumor.

BIBLIOGRAPHY

1—Pennel, V., Adenoma of the Thyroid, Lancet, Vol. 1, page 454, March 24, 1917.

2—Clark, J. J., Calcification of the Thyroid Gland, Southern Medical Journal, Vol. 13, page 183, March, 1920.

3—Arens, Robert A. and Bloom, Arthur R. A case of Calcified Thyroid, Radiology, Vol. 9, pages 333, 334, October, 1927.

4—Crotti, Andre, Thyroid and Thymus (Lea and Febiger) 2nd edition, page 71, 1922.

5—Hertzler, Arthur E. Diseases of the Thyroid Gland, (C. V. Mosby Co.), pages, 55-58, 1922.

6—Jackson, Arnold S. Goiter and Diseases of the Thyroid Gland, Paul B. Hoeber, Inc., page 219, 1926.

7—DeQuervain, F., Goiter and Thyroid Diseases, (Wm. Wood and Co.), page 28, 1924.

8—Bartlett, Willard, The Surgical Treatment of Goiter, (C. V. Mosby Co.), page 48, 1926.

9—Kauffman, Edward, Lehrbuch der Speziellen Pathologischen Anatomie (De Cruyter and Co., Berlin and Leipzig), page 406, 1922.

10—Plummer, W. A., Proceedings of the staff meetings of the Mayo Clinic, Vol. 3, No. 25, page 191, June 27, 1928.

The President's Page

A Personal Communication to the Membership from

ALBERT H. FREIBERG, M.D., Cincinnati

To urge upon those who see these lines the need and desirability of a deeper and more active interest in their medical organization, would seem a matter of supererogation. One feels a bit like the preacher who, from the pulpit, pleads for a better attendance upon church service; those whom his voice can reach have shown by their presence that they do not require his words. Without going into detail it may, nevertheless, be said that there are many of us to whom such a reminder may be given with the hope that good may result. There are not a few who show by their delinquency in dues that their interest in medical organization requires stimulation. They would appear to have grown oblivious, to some degree certainly, of what the organization means to them. Perhaps it had better be said, what medical organization should mean to them. That medical organization is today the chief vehicle by means of which our profession speaks its voice to the people in their own behalf; that it makes articulate what its purposes really are and by this token builds for itself a proper place in their confidence and esteem, may mean much or little to the individual. It should mean much. It requires simply a certain breadth of view to appreciate the fact. It seems safe to say that there are even more of our members who do pay their dues promptly whose interest in the organization is lukewarm and impersonal. They are content to leave the management in the hands of the officers without keeping themselves informed of what is being done and what it all signifies. Should this become true of a considerable proportion of the membership it would constitute the greatest element of weakness possible. If permitted to continue such spirit of indifference would soon spell impotence and loss of influence for good.

During the time of his official connection with the Association your president has had the opportunity of ascertaining that there are not a few of its members who do not, even now, realize what it is doing in their behalf. There are some who do not even know whether its position in professional matters really represents them as they would have it do. The Association strives earnestly to keep the membership fully informed of the state of its activities by publishing a full account of them in *The Journal*. These reports do not make fascinating reading. It may almost be said that one has already demonstrated his deep interest by having read them; albeit an interest which is made to grow by better acquaintance. Even thus, it is, however, almost impossible to visualize what the reports of the various committees signify in expenditure of effort and time and to what extent the work of their members represents an unselfish disregard of personal comfort, of leisure, of individual advantage. The service which is being rendered day by day, to the members of the Association, through its office in Columbus can not be appreciated save by spending a working day in that place. A detailed account of his doings on a busy day especially during a session of Legislature, by our executive secretary, would make interesting reading for any member. The amount of correspondence with individual members is quite extraordinary and the extent to which information is furnished is surprising, to say the least. There is scarcely a phase of the experience of a physician which is not here dealt with. Our layman Executive Secretary has become instructed with regard to the details of medical practice, public health matters, medical defense, medical legislation and its ramifications to an extent which is probably not true of any one of us in whose behalf it is done. Enough cannot be said in praise of those of our membership resident in Columbus who have supplied him with the professional background upon which his experience was built and who are constantly serving all of us in an advisory capacity.

In this number of *The Journal* there will be found the report of the Committee on Revision of the Constitution and By-laws. It is presented, not simply in response to legal requirement, but in the hope that it may meet with the earnest consideration of the membership. Neither was it undertaken because of any temperamental, legallistic leanings on the part of any one, but rather in order to overcome certain shortcomings which have been apparent for a considerable length of time and which have been recognized as responsible for difficulty in interpretation, on the one hand, or for inadequacy on the other hand. It is hoped that the revision may result in our having an instrument by means of which even more effective management of the affairs of the Association may be accomplished and through which the component societies may be brought into still more harmonious cooperation with the parent body. The changes which are being proposed have had the extended and careful thought of the committee and abundant consultation has been resorted to with others of experience and training in cognate matters. That imperfection

remains is beyond question. The earnest scrutiny and thought of the membership are invited, nevertheless, in order that the revision may meet with approval or such alteration as may be well considered. Assurance may be given that no change has been proposed which has not been given careful study by the committee and for which it does not believe there is ample need and justification.

In conclusion, the attention of the members is called to the approaching annual meeting of the Ohio State Medical Association. As has been announced, this will take place in Columbus on May 13, 14 and 15. Meetings in Columbus have uniformly been successful. In the geographical center of the state and, therefore easy of access, Columbus is a most favorable place for the annual meeting. The Association has so often enjoyed the hospitality of the Columbus colleagues that it knows well how to expect a thoroughly satisfactory meeting. Already the arrangements have proceeded to such a degree that this may be definitely assured. Clinical demonstrations have been provided for and it is hoped that they may be well attended. On other occasions there has been some cause to complain of a lack of interest in the clinical exercises which were provided. It is hoped by the officers of the Association that the membership will show, by their presence, that clinical meetings meet with their approval and interest.

On behalf of the officers and Council of the Association, this is an earnest invitation to every member to show by his presence that he has a full realization of what the organization means to him and what it can do for him and for his profession. A large attendance and a sincere interest in what is going on will encourage the further efforts of the Council and officers as nothing else possible can do.

Attend the annual meeting, by all means.

Hotel Reservations for Annual Meeting in Columbus Should be Made Immediately

Ohio physicians planning to attend the Eighty-Fourth Annual Meeting of the Ohio State Medical Association, at the Neil House, Columbus, May 13, 14 and 15, should make their hotel reservations as promptly as possible to insure the choice of convenient and comfortable accommodations during the forthcoming annual meeting. Requests for reservations should be made in writing direct to the hotel selected and verification should be requested.

Columbus is a central gateway to travel east and west, north and south, and a popular center for numerous large conventions, so hotel facilities in the Capital City are generally in much demand. Although Columbus is unusually well supplied with first class hotels, those who delay in reserving quarters for the week of the annual meeting may not be able to secure rooms at, or readily accessible to, the Neil House, the annual meeting headquarters hotel and place where all sessions of the annual gathering will be held.

A record-breaking crowd is anticipated at this year's meeting, because of the central location of Columbus and the unusual program which has been planned, details of which will be published in the April issue of *The Journal*. Space for the exhibits is being sold rapidly, since the splendid facilities offered by the Neil House have always proved popular with exhibitors.

The Neil House, where all the activities of the annual meeting will be centralized, is in the heart of the Columbus business and shopping district; is opposite the State House, and only a few squares from all the other leading hotels and the executive offices of the State Association.

The Division of Conventions and Publicity of the Columbus Chamber of Commerce, which is cooperating with the committees on arrangements of the Columbus Academy of Medicine, has furnished the following list of Columbus hotels and their rates for the convenience of physicians expecting to attend the annual meeting. The rates quoted, the Association has been informed, will be adhered to during the annual meeting.

The list follows:

NEIL HOUSE, South High Street, opposite State House, 657 rooms; CONVENTION HEADQUARTERS; single room with bath, $3.00 to $5.00; double room with bath, $5.00 to $7.50; twin beds with bath, $5.50 to $7.50.

DESHLER-WALLICK HOTEL, Broad and High Streets, 1000 rooms; one-half square from headquarters hotel; single room with bath, $3.00 to $8.00; double room with bath, $5.00 to $10.00; twin beds with bath, $6.50 to $12.00.

FORT HAYES HOTEL, 33 West Spring Street, 300 rooms; three and one-half squares from headquarters hotel; single room with bath, $2.50 to $3.50; double room with bath, $4.00 to $6.00.

CHITTENDEN HOTEL, Spring and High Streets, 260 rooms, three and one-half squares from headquarters hotel; single room with bath, $2.00 to $3.00; double room with bath, $3.50 to $4.00; twin beds with bath, $4.50 to $5.00.

HOTEL SENECA, Broad Street at Grant Avenue, 75 rooms, six and one-half squares from headquarters hotel; single room with bath, $2.00 to $3.00; double room with bath, $3.50 to $5.00; twin beds with bath, $6.00 and up.

HOTEL CHARMINEL, State Street at Grant Avenue, 44 rooms, five and one-half squares from headquarters hotel; single room with bath, $2.50 to $4.00; double room with bath, $4.00 to $5.50.

NEW VIRGINIA HOTEL, Third and Gay Streets, 250 rooms, two and one-half squares from headquarters hotel; single room with bath, $2.00 to $2.50; double room with bath, $3.50 to $4.50.

NEW SOUTHERN HOTEL, Main and High Streets, 250 rooms; three and one-half squares from headquarters hotel; single room with bath, $2.00 to $4.00; double room with bath, $3.50 to $6.00; twin beds with bath, $5.00 to $7.00.

HOTEL WINTON, Town and Third Streets, 69 rooms, two and one-half squares from headquarters hotel; single room with bath, $1.50 to $2.00; double room with bath, $3.00 to $4.00.

ROL-EDDY HOTEL, 227 North High Street; 160 rooms, four squares from headquarters hotel; single room with bath, $2.00 to $2.50; double room with bath, $4.00 to $5.00.

HOTEL NORWICH, Fourth and State Streets, 100 rooms, two and one-half squares from headquarters hotel; single room with bath, $2.00 to $2.50; double room with bath, $4.00 to $5.00.

JEFFERSON HOTEL, 17 East Spring Street, 86 rooms, three and one-half squares from headquarters hotel; single room with bath, $2.00 to $2.25; double room with bath, $3.50 to $6.00.

HOTEL COLUMBUS, Long and Fifth Streets, 191 rooms, five and one-half squares from headquarters hotel; single room with bath, $2.00 to $2.50; double room with bath, $3.00 to $3.50.

Smallpox Warning is Issued by Health Department

Review of the smallpox figures for Ohio during the last few months reveals that "the seed-beds of virulent smallpox, of either or both of its worst types are growing and only the breaking through is needed for the state to reap a harvest of death", the *Ohio Health News*, semi-monthly publication of the State Department of Health, warns.

Commenting further on the outbreak which virtually reached epidemic proportions in some parts of the state, the state department's publication said in part:

"With 1810 cases of smallpox reported in Ohio for the 10 weeks ended January 31, there is ample indication that this is to be a smallpox year. This record is the culmination of a long and fairly uniform line of increase that began about midsummer. During the 10-weeks period under consideration, there were only three weeks in which there were apparent recessions from the high tide of the week before, and there is internal evidence that the declines were due, not to fewer cases but to delay in reporting. The record is one that is not pleasant to contemplate. Set forth in numbers of cases by weeks ended on the dates given, it follows:

November 29	126
December 6	160
December 13	127
December 20	188
December 27	123
January 3	191
January 10	192
January 17	218
January 24	305
January 31	180
Total	1810

"This is an apparent total of 1810, but it is only an apparent total. Delayed reports may be expected to increase it appreciably.

"Concealed cases also are a factor. It is rare indeed that a medical inspector from the State Department of Health goes out on a smallpox investigation without discovering cases that have been hidden away.

"Back of the whole unhappy—and exceedingly menacing—situation is a widespread, unreasonable and unreasoning opposition to vaccination, the only sure safeguard against the most loathsome of diseases. It is incited and fostered by a voluble and vituperative army of agitators, mostly opposed to all forms of preventive medicine; with a large representation of faith healers, and nearly all the groups are centered around one or more of those militant michief-makers who were born in the objective case and have been working at it all their lives.

The result is that when smallpox incidence is low, virtually nothing is done, except in scattered localities, where boards of education have been educated—usually by sad experience—as to the necessity of preventive measures, or where the health commissioner is strong enough to dominate the situation. When the smallpox tide begins to rise, it becomes easier, in the more progressive localities, to pronounce a campaign of prevention; but at the same time the 'antis' become more vituperative, more virulent, and more vigorous in aiding and abetting evasion of disobedience of law and regulation. * * *

"Despite all the handicaps of lethargy, public indifference and active individual opposition, most health commissioners are doing yoeman work, backed by intelligent driving force. They are running down and vaccinating contacts; enforcing isolation; winning their school boards over to compulsory vaccination; backing up the great body of the medical profession, whose attitude is correct and whose energy is abundant, and, where needed, giving to the relatively few complaisant doctors that need of encouragement, or actual pressure, that is essential to bring them into active cooperation."

The Department's record show 3223 cases of smallpox reported in the state during 1929.

Proposed Amendments to the Constitution and By-Laws of the Ohio State Medical Association, to be Voted on by the House of Delegates at the Annual Meeting in Columbus, May 13, 14 and 15, 1930

Pursuant to the action of the House of Delegates at the 1929 Annual Meeting in authorizing and instructing a special committee on Constitution to formulate and propose various amendments to the Constitution and By-Laws, to be voted on at the 84th Annual Meeting in 1930, that committee was organized and has held a series of conferences for the purpose of considering additional and modified provisions to the present Constitution and By-Laws.

The procedure by the special committee on Constitution is based on the resolution adopted by the 1929 House of Delegates (pages 474 and 475 of the June, 1929, issue of the *Ohio State Medical Journal*) as follows:

WHEREAS, There are many inconsistencies in the constitution and by-laws of the component county medical societies, especially pertaining to eligibility to membership and disciplinary procedure, and

WHEREAS, Each component county medical society and academy should possess a constitution and by-laws, a copy of which shall be on file in the headquarters of the State Association, and

WHEREAS, Such constitutions and by-laws of component societies, as well as their official titles, as set forth in their charters, should conform to the constitution and by-laws and the records of the State Association, and

WHEREAS, Whenever amendments to the constitution or by-laws of the State Association have been adopted by the House of Delegates, component county societies should be required to bring their constitutions into conformity with such amendments, whenever such changes are necessary to avoid conflicting provisions, and

WHEREAS, There exist some possible conflicts in the provisions of the present Constitution and By-Laws of the State Association on eligibility to membership, therefore,

BE IT RESOLVED by the House of Delegates of the Ohio State Medical Association at its Annual Meeting in Cleveland, May 7, 8 and 9, 1929, that the President of the State Association, with the confirmation of the Council, appoint a special committee of five, of which the President shall be a member, to suggest proposed amendments to the Constitution and By-Laws of the State Association which shall be submitted to and acted upon by the Council not later than January 15, 1930, and submitted in conformity with the present constitutional requirements for amendments, in sufficient time to be acted upon by the House of Delegates at the next annual meeting, and which shall clarify the routine organization procedure in the constitutions and by-laws of component societies, leaving as much latitude and avoiding as much excessive standardization as possible in local functions and activities of medical organization.

The special committee on Constitution, as created by the Council based on authorization from the House of Delegates, consists of Dr. Albert H. Freiberg, President, and Chairman of the Committee; Dr. John B. Alcorn, Dr. E. R. Brush, Dr. C. L. Cummer and Dr. F. S. Van Dyke.

In order that the membership generally as well as the members of the House of Delegates may have an opportunity of considering the proposed amendments well in advance of the Annual Meeting and in compliance with the requirements for a consideration of amendments (under the present provisions of Article XII, of the Constitution, and Chapter XIII, of the By-Laws) these are being published in detail.

The present Constitution and By-Laws are published in their entirety in the left hand column and all Articles, Chapters and Sections for which amendments are recommended by the committee on Constitution are set forth in detail in the right hand column as follows:

CONSTITUTION

PRESENT CONSTITUTION

ARTICLE I.

NAME. The name and title of this corporation shall be THE OHIO STATE MEDICAL ASSOCIATION.

ARTICLE II.

PURPOSE. The purposes of this Association are to promote the science and art of medicine, and the protection of public health. More especially, the purposes of this organization shall be to federate and bring into one compact organization the entire medical profession of the State of Ohio, and to unite with similar organizations in other states to form the American Medical Association. Its purposes shall be to extend medical knowledge; to elevate the standard of medical education; to encourage enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to safeguard and foster their material interests; and to enlighten and direct public opinion to the great problems of state medicine; so that the profession shall become more capable and honorable within itself, and more useful to the public in the prevention and cure of disease, and in prolonging and adding comfort to life.

PROPOSED AMENDMENTS

ARTICLE I.

(No amendments recommended).

ARTICLE II.

(No amendments recommended).

CONSTITUTION

PRESENT CONSTITUTION

ARTICLE III.

SECTION 1. COMPONENT SOCIETIES. Component societies shall be those county medical societies which hold charters from this Association.

SEC. 2. The terms, county medical society and component county medical society shall be deemed to include all county medical societies and academies of medicine now in affiliation with this Association, or which may hereafter be organized and chartered by the House of Delegates of this Association.

ARTICLE IV.

SECTION 1. COMPOSITION OF THE ASSOCIATION. This Association shall consist of members and delegates.

SEC. 2. MEMBERS. The members of this Association shall be the members of the component county medical societies who have been certified to the headquarters of this Association, and whose dues and assessments for the current year have been received by the Executive Secretary.

SEC. 3. DELEGATES. Delegates shall be those elected in accordance with this Constitution and By-Laws to represent the component county societies in the House of Delegates of this Association.

ARTICLE V.

HOUSE OF DELEGATES. The House of Delegates shall be the legislative body of this Association, and shall consist (1) of delegates elected by the component county societies, and (2) the officers of the Association enumerated in Section 1 of Article VII.

ARTICLE VI.

SECTION 1. ANNUAL SESSION. This Association shall hold an annual session during which there shall be at least two general meetings, open to all registered members, delegates and guests.

SEC. 2. PLACE OF MEETING. The time and place for holding each annual session shall be fixed by the House of Delegates, or such authority may be delegated to the Council.

SEC. 3. SPECIAL MEETINGS. Special meetings of either this Association or the House of Delegates may be called by a two-thirds vote of the Council or upon petition by twenty delegates.

ARTICLE VII.

SECTION 1. OFFICERS. The officers of this Association shall be a President, a President-elect, the Past President, a Treasurer and ten Councilors.

SEC. 2. The elective officers and councilors as defined in the preceding section, shall constitute the Council and shall be the board of trustees of this corporation. The Council shall have full authority and power of the House of Delegates between annual sessions, unless the House of Delegates shall be called into session as provided in the Constitution and By-Laws.

SEC. 3. ELECTION. ELIGIBILITY. The officers of this Association shall be elected by the House of Delegates on the second day of the annual

PROPOSED AMENDMENTS

ARTICLE III.

(No amendments recommended).

ARTICLE IV.

SECTION 1. COMPOSITION OF THE ASSOCIATION. This Association shall consist of one class of members as hereinafter defined.

SEC. 2. MEMBERS. The members of this Association shall be eligible physician members of the component county medical societies, as further defined in the accompanying By-Laws, who have been certified by the designated officer of the component society, and whose dues and assessments for the current year have been received at the headquarters of this Association.

(No amendments recommended for Sec. 3).

ARTICLE V.

(No amendments recommended).

ARTICLE VI.

SECTION 1. ANNUAL MEETING. This Association shall hold an annual meeting during which there shall be at least two general sessions, open to all registered members, delegates and guests.

SEC. 2. PLACE OF MEETING. The time and place for holding each annual meeting shall be fixed by the House of Delegates, or such authority may be delegated to the Council.

(No amendments recommended for Section 3).

ARTICLE VII.

(Change words "annual session" to "annual meeting" in this Article).

CONSTITUTION

PRESENT CONSTITUTION

session. No person shall be eligible to an elective office who has not been a member of this Association during the preceding two years.

SEC. 4. TERM OF OFFICE. The President shall serve one year and shall be succeeded by the President-elect. The Treasurer shall be elected for a term of three years. The term of office of Councilors shall be two years, five to be elected each year. All of these officers shall serve until their successors are elected and qualified.

SEC. 5. For the purpose of membership, the fiscal year of this Association shall begin on January 1 and end on December 31. Annual dues in The Ohio State Medical Association shall be payable in advance.

ARTICLE VIII.

SECTION 1. THE SCIENTIFIC ASSEMBLY. The Scientific Assembly of The Ohio State Medical Association shall be the convocation of its members for the presentation and discussion of subjects pertaining to the science and art of medicine in its widest application.

SEC. 2. The Scientific Assembly shall be divided into sections as provided in the By-Laws.

ARTICLE IX.

SEAL. This Association shall have a common seal. The power to change or renew the seal shall rest with the House of Delegates.

ARTICLE X.

REFERENDUM. At any general meeting of this Association it may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a vote of its members, submit any such question to the membership of this Association for its vote. For a final vote there shall be required a majority of all the members of this Association to determine the question.

ARTICLE XI.

AMENDMENTS. The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates and officers registered at that annual session, provided that such amendment shall have been published in *The Journal* of this Association two months before the annual session, and that it shall have been sent officially by the Executive Secretary to each component county society at least two months before the annual session at which final action is to be taken.

PROPOSED AMENDMENTS

ARTICLE VIII.

(No amendments recommended).

ARTICLE IX.

(No amendments recommended).

ARTICLE X.

(No amendments recommended).

ARTICLE XI.

(Present Article XI to be numbered Section 1, of the same Article and amended to read as follows):

SECTION 1. AMENDMENTS. The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates and officers registered at that annual meeting, provided that such amendment shall have been published in *The Journal* of this Association two months before the annual meeting, and that it shall have been sent officially to each component county society at least two months before the annual meeting at which final action is to be taken.

A second section to be added to this article reading as follows:

SEC. 2. CONFORMITY BY COMPONENT SOCIETIES. When an amendment to this Constitution has been made, as provided by Section 1 of this article, the secretary of each component society shall be notified within sixty days after it has become effective. It shall become incumbent upon each component society to make such change in its constitution and by-laws as will bring about conformity to the change in the constitution of the Ohio State Medical Association. Written notice of compliance with this provision shall be sent to the headquarters of the State Medical Association within six months after notice has been given and it shall be submitted to its Council for approval.

BY-LAWS

PRESENT BY-LAWS

CHAPTER I.

SECTION 1. All members of this Association shall have the right to attend all meetings and to take part in all of the scientific proceedings of the annual session.

SEC. 2. QUALIFICATION. The name of a physician upon the proper certified roster of this Association shall be prima facie evidence of his right to register at the annual session.

SEC. 3. DISABILITY. No person who is under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this Association.

SEC. 4. MEMBERS. This Association shall consist of one class of members. Members to be eligible to this Association shall be citizens of the United States or who have declared their intention of becoming citizens by filing with the Federal Government, their first citizenship papers, and members of component county medical societies including all of their classification of local membership, whose dues and assessments in The Ohio State Medical Association have been received from the secretary-treasurer of county societies by the headquarters of this Association.

SEC. 5. DUES. If any local society provides for a diversified classification of its members, dues for them in The Ohio State Medical Association shall be collected and transmitted to the Executive Secretary of this Association or appropriated from the funds of the local society. Exempted from this provision are such local members as have not the degree of Doctor of Medicine, such as are still serving as hospital interns on full time on a nominal salary, such as have retired from active practice of medicine, and non-resident members who are members of organized medicine in good standing in the county in which they reside.

SEC. 6. REGISTRATION. Each member in attendance at the annual session shall register, when his right to membership has been verified by reference to the records of this Association. No member or delegate shall take part in any of the proceedings of the annual session, nor be entitled to any of the privileges or benefits of membership until he has complied with the provisions of this chapter.

CHAPTER II.

SECTION 1. SECTIONS. The Scientific Assembly shall be divided into the following sections:

1. Medicine, (including Pathology and Physiology).
2. Surgery.

PROPOSED AMENDMENTS

CHAPTER I.

(Change words "annual session" to "annual meeting" in this Chapter).

SEC. 4. MEMBERS. This Association shall consist of one class of members only, and it shall include all eligible members of all component county societies, providing their dues and assessments in this Association have been received from the secretary-treasurers of such respective component county societies, at the headquarters of this Association.

To be eligible to membership in this Association, a person shall possess all of the following qualifications, to-wit:

(a) He must be a citizen of the United States or must have declared his intention of becoming a citizen by filing first citizenship papers with the United States Government.

(b) He must have been licensed to practice medicine and surgery by licensing authority constituted by the State of Ohio.

(c) He must hold the degree of doctor of medicine or some foreign degree in medicine, regarded by the Council of the Ohio State Medical Association as equivalent thereto, if applying for membership after June 1, 1930.

SEC. 5. CLASSIFICATION OF LOCAL MEMBERS. If any component society provides for a diversified classification of its members, dues for them in the Ohio State Medical Association shall be collected and transmitted to the executive secretary of this Association or appropriated from the funds of the local society. Exempted from this provision are such local members who are not eligible for membership in this Association under the requirements of Section 4 of this Chapter, and such as are still serving as hospital interns on full time on a nominal salary, such as have retired from active practice of medicine, and non-resident members who are members of organized medicine in good standing in the county in which they reside.

SEC. 6. REGISTRATION. Each member in attendance at the annual meeting shall register, when his right to membership has been verified by reference to the records of this Association. No member or delegate shall take part in any of the proceedings of the annual meeting until he has registered.

CHAPTER III.

(Chapter II to be renumbered as Chapter III and the present Chapter IX to be renumbered as Chapter II and amended as indicated in this column opposite Chapter IX as it is at present).

BY-LAWS

PRESENT BY-LAWS

3. Obstetrics and Pediatrics.
4. Eye, Ear, Nose and Throat.
5. Nervous and Mental Diseases.
6. Public Health and Industrial Medicine.

SEC. 2. SECTION OFFICERS. The officers of each section shall be a chairman and a secretary. Each shall serve for one year, or until his successor has been elected.

SEC. 3. ELECTION OF SECTION OFFICERS. The election of officers of the sections shall be the first order of business of the second meeting of the sections at each annual session of this Association.

SEC. 4. SECTION MEETINGS. Each Section shall hold its meetings at such time as the Council shall direct. No section meeting shall be allowed to conflict with a general meeting.

SEC. 5. TITLE OF PAPERS. No paper shall be presented before a section unless the title and an abstract which shall contain not less than thirty nor more than one hundred and fifty words is in the hands of the program committee at least sixty days before the first day of the annual session.

CHAPTER III.

SECTION 1. GENERAL MEETINGS: PRESIDENT'S ADDRESS: ORATIONS. The general meetings shall be open to all registered members and guests. Before them at such time and place as may have been arranged shall be delivered the annual address of the President, the President-elect and the annual orations.

SEC. 2. TIME LIMIT OF PAPERS. No address or paper before this Association or any section except those of the President, President-elect and orators, shall occupy more than twenty minutes in its delivery. No members, except by unanimous consent, shall speak more than once in the discussion of any paper nor longer than five minutes.

SEC. 3. PAPERS. All papers read before this Association shall be its property. Each paper shall be deposited with the Section Secretary when read. Authors shall not cause papers read before this Association to be published as original elsewhere, nor until after they have been published in the official journal of this Association.

CHAPTER IV.

SECTION 1. HOUSE OF DELEGATES. The House of Delegates shall meet annually at the time and place of the annual session of this Association.

SEC. 2. RATIO OF REPRESENTATION. Each component county society shall be entitled to one delegate in the House of Delegates for each one hundred full paid members in this Association, or fraction thereof; provided, however, that each county society shall be entitled to at least one delegate or one alternate.

SEC. 3. QUORUM. A majority of the registered delegates and officers shall constitute a quorum. All of the meetings of the House of Delegates shall be open to members of this Association.

SEC. 4. COMMITTEES OF THE HOUSE OF DELEGATES. From among members of the House of Delegates the President, for the purpose of expediting proceedings, shall appoint Reference Committees as follows: On Annual Reports, on President's Address, on Resolutions, to which shall be referred all resolutions introduced into the House; a Committee on Credentials; tellers,

PROPOSED AMENDMENTS

(Change to word "meeting" to "session" and vice verse in sections 3, 4 and 5).

CHAPTER IV.

(Chapter III to be renumbered as Chapter IV).

(Change word "meetings" to "sessions").

CHAPTER V.

(Chapter IV to be renumbered as Chapter V).

(Change word "session" to "meeting").

SEC. 2. RATIO OF REPRESENTATION. Each component county society shall be entitled to one delegate in the House of Delegates for each one hundred full paid members in this Association, or fraction thereof; provided, however, that each county society shall be entitled to at least one delegate and one alternate.

SEC. 3. QUORUM. A majority of the registered delegates and officers of this Association shall constitute a quorum. All of the sessions of the House of Delegates shall be open to members of this Association.

BY-LAWS

PRESENT BY-LAWS

sergeants at arms, and other committees considered by him to be necessary.

SEC. 5. FUNDS. The House of Delegates shall provide funds for the expenses of this Association by a per capita assessment upon each of the county societies.

SEC. 6. DELEGATES TO AMERICAN MEDICAL ASSOCIATION. The House of Delegates shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

SEC. 7. CHARTERS. The House of Delegates shall, upon application to and recommendation by the Council, provide and issue charters to county societies organized to conform to this Constitution and By-Laws. Such charters shall be signed by the President and Executive Secretary. The House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with this Constitution and By-Laws.

SEC. 8. MULTIPLE SOCIETIES. The House of Delegates shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district or other classes of societies, and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies.

SEC. 9. COUNCILOR DISTRICTS. The House of Delegates shall divide the counties of the state into ten Councilor Districts. A district society may be organized in any of these districts to meet at such a time or times as the society may fix between the annual sessions of The Ohio State Medical Association.

The presidents of the county societies in each district shall be the vice president of such district societies.

SEC. 10. SPECIAL COMMITTEES. Any member who is in good standing in this Association may be appointed to serve on any committee created for a special purpose. All members of committees who are not members of the House of Delegates shall have the right to present their reports, in person, to the House of Delegates, and to participate in the debate thereon, but shall not have the right to vote.

CHAPTER V.

SECTION 1. COMMITTEE ON NOMINATIONS. The House of Delegates on the first day of the annual session shall elect a committee on nominations consisting of ten delegates, one from each councilor district. The committee on nomina-

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(Two new sections to be added to Chapter V, at present Chapter IV, immediately following Section 7).

SEC. 8. THE TITLE OF A COMPONENT SOCIETY. The name and title of each component society shall read exactly as found in its charter. No change in such name shall be made without the approval of the Council of the Ohio State Medical Association.

(Sec. 8 to be renumbered as Sec. 10).

SEC. 9. CHARTER ON RECORD. The charter of each component society, as issued by the Ohio State Medical Association, shall be preserved and shall be in the custody of the secretary of such component society at all times.

(Sec. 9 to be renumbered as Sec. 11 and amended to read as follows):

SEC. 11. COUNCILOR DISTRICTS. The House of Delegates shall divide the counties of the state into ten Councilor Districts. A district society may be organized in any of these districts to meet at such a time or times as the society may fix between the annual meetings of The Ohio State Medical Association.

The presidents of the county societies in the several districts shall be the vice presidents of their respective district societies.

(Sec. 10 to be renumbered as Sec. 12).

CHAPTER VI.

(Chapter V. to be renumbered as Chapter VI. and to be amended as follows):

SEC. 1. COMMITTEE ON NOMINATIONS. The House of Delegates on the first day of the annual meeting shall elect a committee on nominations

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tions shall report the result of its deliberations to the House of Delegates in the form of a ticket containing the names of three members for the office of President-elect, and of one member for each of the other offices to be filled at that annual session. No two candidates for President-elect shall be from the same district, and each candidate for Councilor must be a resident of the district for which he is nominated.	consisting of ten delegates, one from each councilor district. The committee on nominations shall report to the House of Delegates a ticket containing the name of one member for each of the offices to be filled at that annual meeting except that of President-elect. Nominations for the office of President-elect shall be made from the floor of the House of Delegates. Each nominee for Councilor must be a resident of the district for which he is nominated.
SEC. 2. NOMINATIONS. The report of the nominating committee and the election of officers shall be the first order of business of the House of Delegates at the second meeting of the House.	SEC. 2. NOMINATIONS. The report of the nominating committee, nominations for the office of President-elect, and the election of officers shall be the first order of business of the House of Delegates at the second regular session of the annual meeting. Each nominating speech shall be limited to three (3) minutes. Not more than one speech shall be made in seconding a given nomination and it shall be limited to one (1) minute.
SEC. 3. ELECTION OF OFFICERS. All elections of officers shall be by ballot and a majority of the votes cast shall be necessary to elect except for delegates and alternates to the American Medical Association. In case no nominee receives a majority of the votes on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken. The procedure shall be continued until one of the nominees receives a majority of all the votes cast, when he shall be declared elected. In case no delegates or alternates for the American Medical Association receive on the first ballot a majority of the vote, the nominee shall be declared elected in the order of the highest number of votes received, until the allotted number shall have been chosen. In case of a tie vote for delegate or alternate, the tie shall be determined by lot.	**(No amendments recommended for Sec. 3).**
SEC. 4. NOMINATIONS FROM FLOOR. Nothing in this chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.	**(No amendments recommended for Sec. 4).**
CHAPTER VI.	CHAPTER VII.
SECTION 1. DUTIES OF PRESIDENT. The President shall preside at the meetings of this Association and of the House of Delegates. He shall appoint by and with the consent of Council, a committee of three from the Council, on Auditing and Appropriations, and a committee on Arrangements for the annual session. Each of these committees shall serve for a term of one year. He shall appoint all committees for the selection of which other provision is not made. He shall deliver an annual address at such time, during the annual session, as may be arranged. He shall give a deciding vote in case of a tie. He shall be the chairman of the Council, and shall perform such other duties as parliamentary usage may require. He shall be a member of Council for a period of one year immediately succeeding his term of office. He shall be ex-officio a member of all committees of this Association.	**(Chapter VI to be renumbered as Chapter VII).**
EXPENSES OF PRESIDENT. The necessary traveling expenses incurred by the President in the line of duty herein imposed may be allowed by the Auditing and Appropriations committee, but this shall not include his expenses in connection with the annual session of this Association.	**(Change words "annual session" to "annual meeting" in this Chapter).**

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SEC. 2. PRESIDENT-ELECT. The President-elect shall be a member of the Council, and shall act as Vice President in the absence or disability of the President. If the office of President should become vacant the President-elect shall succeed to the presidency.

SEC. 3. TREASURER. The Treasurer shall give bond, at the expense of this Association in such an amount as shall be required by the Council. He shall be the financial agent of this Association. He shall receive all funds due this Association from every source whatever, except accounts due *The Journal* in the conduct of its business. He shall deposit the funds in a bank of deposit in the name of The Ohio State Medical Association. He shall keep a complete set of books concerning the receipts and expenditures of this Association, except those of *The Journal*. He shall, under direction of the House of Delegates, sell or lease any estate belonging to this Association and execute the necessary papers. He shall pay money out of the treasury upon voucher as directed by the Auditing and Appropriations committee, (Chapter VII, Section 4), and shall render a monthly trial balance of his accounts to each member of the Council.

SEC. 4. EXECUTIVE SECRETARY. The Executive Secretary shall be ex-officio the secretary of The Ohio State Medical Association and all its committees. He shall be the executive agent of this Association transacting its business under the direction of the officers of this Association. He shall collect all dues from members of the Association through the secretaries of the component societies, and pay them to the Treasurer. He shall be the business manager and news editor of *The Journal*. He shall pay over the profits of *The Journal* to the Treasurer at the end of each fiscal year, or whenever ordered to do so by the Auditing and Appropriations committee or by the House of Delegates. Whenever the income of *The Journal* does not meet its expense, he shall make requisition, which must be approved by the Auditing and Appropriations committee, on the Treasurer for the necessary amount. He shall have charge of the business offices of this Association and may employ such aid as shall be authorized by Council. He shall be custodian of all record books and papers belonging to this Association, except those of the Treasurer. He shall provide for the registration of the members and delegates to the annual session. He shall provide for the reporting of the proceedings of the several sections. He shall conduct the official correspondence notifying members of meetings, officers of their election, committees of their appointment and duties, and shall perform such other duties as may be assigned to him by the Council. He shall give bond, at the expense of this Association, in such amount as shall be required by Council.

CHAPTER VII.

SECTION 1. COUNCIL MEETINGS. The Council shall hold daily meetings during the annual session of this Association, and at such other times as necessity may require, subject to the call of the President or on petition of three Councilors. It shall meet on the last day of the annual session of this Association for re-organization. At this meeting it shall elect a secretary who shall

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SEC. 2. PRESIDENT-ELECT. The President-elect shall be a member of the Council, and shall assume the duties of the President during his absence or disability. If the office of President should become vacant the President-elect shall succeed to the presidency.

(Change words "annual session" to "annual meeting").

CHAPTER VIII.

(Chapter VII to be renumbered as Chapter VIII)

(Change words "annual session" to "annual meeting in this Chapter).

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keep a permanent record of its proceedings. It shall cause to be published in *The Journal* of this Association, a record of its meetings and actions.

SEC. 2. DUTIES, INDIVIDUAL. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit each county in his district at least once each year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members, and to keep in touch with activities of and aid in the betterment of the various societies.

SEC. 3. EXPENSES OF COUNCILORS. The necessary traveling expenses incurred by each Councilor in the line of duties herein imposed may be allowed by the committee on Auditing and Appropriations, but this shall not include his expenses in attending the annual session of this Association.

SEC. 4. DUTIES. COLLECTIVE. The Council shall be the executive body of the House of Delegates and shall, between sessions exercise the powers conferred on the House of Delegates by this Constitution and By-Laws.

The Council shall be the board of censors of this Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or of a county society. Its decision in all cases, including questions regarding right of membership in this Association shall be final, except that an appeal may be made to the House of Delegates.

SEC. 5. AUDITING AND APPROPRIATIONS COMMITTEE. The duties of this committee shall be: To prescribe the method of accounting and to audit any or all accounts of The Ohio State Medical Association. The committee shall prepare and present to the Council for action at its first meeting in January of each year, a budget providing for the necessary expenses of this Association. Any surplus or balance of funds for the year shall go into the general fund for re-apportionment.

SEC. 6. COMMITTEE ON ARRANGEMENTS. The Committee on Arrangements for the Annual Meeting shall consist of three members of Council. On recommendation of this committee, the Council shall appoint a general chairman of a local auxiliary committee on arrangements, who, together with the president of the local academy of medicine or county medical society, shall appoint and organize the personnel from among the members of the society in the county in which the annual meeting is to be held. The auxiliary committee shall, through the committees of its own selection, provide suitable meeting places and shall have general charge of all local arrangements subject to the approval of the Committee on Arrangements and Council. All receipts accruing from the annual session shall be turned over to the Committee on Arrangements, and all expenditures in connection with the annual session must be authorized in advance by the Committee on Auditing and Appropriations. Immediately following the annual session, the Com-

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mittee on Arrangements shall forward to the Treasurer of The Ohio State Medical Association any accumulated balance. It shall meet any deficit by application to this Council, through the Committee on Auditing and Appropriations.

SEC. 7. VACANCIES. The Council shall by appointment fill any vacancy in office occurring in the interval between the annual sessions of the House of Delegates. The appointee shall serve until his successor has been elected and qualified.

SEC. 8. PROGRAM. The Council shall determine the character and scope of the scientific proceedings of this Association for each session. At least thirty days previous to each annual session, it shall prepare and issue a program, announcing the order in which papers, discussions and business of the House of Delegates shall be presented. This program shall be adhered to by this Association as nearly as practicable.

SEC. 9. EXECUTIVE SECRETARY. The Council may employ an Executive Secretary, who need not be a physician, nor a member of this Association.

SEC. 10. SALARIES. The salaries of all employes of this Association shall be fixed by Council.

SEC. 11. HEADQUARTERS. The Council shall provide such state headquarters for this Association as may be required to properly conduct its business.

CHAPTER VIII.

SECTION 1. STANDING COMMITTEES. The Standing Committees of The Ohio State Medical Association shall be:

1. A Committee on Public Policy.
2. A Committee on Publication.
3. A Committee on Medical Defense.
4. A Committee on Medical Education and Hospitals.
5. A Committee on Medical Economics.

Each of these committees shall consist of three members, each of whom shall serve for a term of three years. One member of each of these committees shall be appointed annually by the President, by and with the consent of the House of Delegates, provided that at the 1925 annual session one member of each of the foregoing committees shall be appointed for a term of three years; one each for two years; and one each for one year. The President shall designate the chairman of each of these committees.

SEC. 2. PUBLIC POLICY. The Committee on Public Policy shall consist of three members, one of whom shall be appointed each year, and the President and the President-elect. There shall be a joint meeting of this and an auxiliary committee, as hereinafter provided in Chapter XII, Section 10, held annually, as may be ordered on the call of the chairman or three members of the state committee. The chairman of the state committee, and in his absence, the President, shall act as chairman at the joint committee meetings. Under the direction of the state committee, the joint committee shall represent this Association in securing and enforcing legislation in the interest of public health and of scientific medicine.

SEC. 3. PUBLICATION. The Committee on Pub-

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SEC. 7. VACANCIES. The Council shall by appointment fill any vacancy in office occurring in the interval between the annual sessions of the House of Delegates except as otherwise provided for by the Constitution and By-laws. The appointee shall serve until his successor has been elected and qualified.

SEC. 9. EXECUTIVE SECRETARY. The Council may employ an Executive Secretary for this Association, who need not be a physician, nor a member of this Association.

CHAPTER IX.

(Chapter VIII to be renumbered as Chapter IX).

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lication shall consist of three members, one of whom shall be appointed each year. The Committee shall have referred to it all reports on scientific subjects, and all scientific papers and discussions heard before this Association. It shall be empowered to curtail, abstract or reject papers and discussions. The committee shall have authority to arrange for the publication and distribution of *The Journal*.

SEC. 4. MEDICAL DEFENSE. The Committee on Medical Defense shall consist of three members, one of whom shall be appointed each year. This committee shall prepare plans and establish rules for the defense of members of this Association against whom suits for civil malpractice have been brought. It shall assist in the defense of any member who is in good standing when sued for civil malpractice if the member was in good standing and had complied with the rules of the committee when the service on account of which suit was brought, was rendered as well as when the alleged cause of action arose. There shall be one member elected or appointed annually by each component society to serve as auxiliary to said committee.

SEC. 5. MEDICAL EDUCATION AND HOSPITALS. The Committee on Medical Education and Hospitals shall consist of three members, one of whom shall be appointed each year. This committee shall serve in this state for the Council on Medical Education and Hospitals of the American Medical Association, on behalf of The Ohio State Medical Association, and shall have referred to it all questions pertaining to hospitals and medical education.

SEC. 6. MEDICAL ECONOMICS. The Committee on Medical Economics shall consist of three members, one of whom shall be appointed each year. It shall investigate all matters affecting the economic status of physicians and shall report annually to the House of Delegates such recommendations as may, in its judgment, seem proper.

SEC. 7. REPORTS. Reports of the standing and special committees shall be published in the official *Journal* of the month preceding the date of the annual session of this Association, and these reports must be in the hands of the Executive Secretary sixty days in advance of the annual session.

CHAPTER IX.

SECTION 1. ASSESSMENTS. The annual dues and assessments shall be determined by the House of Delegates, and shall be levied per capita on the members of The Ohio State Medical Association. They shall be payable on or before January 1st of the year for which they are levied. The secretary of each component society shall cause to be collected and shall forward to the officers of this Association the dues and assessments for its members, together with such data as shall be required for a record of its officers and membership.

SEC. 2. RECEIPTS OF DUES. QUALIFYING MEMBERSHIP. The record of payment of dues and assessments on file in the offices of this Association shall be final as to the fact of payment by a

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(Chapter IX of the present By-Laws to be renumbered as Chapter II, to be inserted immediately following Chapter I and to be amended as follows):

CHAPTER II.

SEC. 1. DUES AND ASSESSMENTS. The annual dues and all assessments shall be determined by the House of Delegates, and shall be levied per capita on the members of The Ohio State Medical Association. They shall be payable on or before January 1st of the year for which they are levied. The dues and assessments shall be collected by the designated officer of each component society and shall be forwarded to the headquarters of this Association, together with such data as shall be required for a record of its officers and membership.

(No amendments recommended for Sec. 2).

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member and as to his right to participate in the business and proceedings of this Association and of the House of Delegates.	
SEC. 3. DEFENSE. For the purposes of medical defense a member shall be deemed in arrears from and during the period extending from January 1st of the current year until his dues and assessments shall have been received at the offices of this Association, having been remitted by the secretary of the component society of which he is a member.	SEC. 3. ARREARS IN MEMBERSHIP. A member of this Association shall be deemed delinquent and in arrears in all his relationships as a member, including his rights to medical defense, from and during the period extending from January 1st of the current year until his dues and assessments shall have been received at the headquarters of this Association, having been remitted by the designated officer of the component society of which he is a member.
SEC. 4. PENALTY FOR FAILURE TO REMIT. Any county society which fails to make the reports required, at least thirty days before the annual session of The Ohio State Medical Association, shall be held suspended, and none of its members or delegates shall be permitted to participate in any of the proceedings of this Association or of the House of Delegates.	(No amendments recommended for Sec. 4).
CHAPTER X.	CHAPTER X.
ETHICS. The ethical principles governing the members of the American Medical Association shall govern members of this Association.	(No amendments recommended for Chapter X).
CHAPTER XI.	CHAPTER XI.
The deliberations of this Association shall be conducted in accordance with parliamentary usage as defined in Robert's Rules of Order.	(No amendments recommended for Chapter XI).
CHAPTER XII.	CHAPTER XII.
SECTION 1. COUNTY SOCIETIES. All county societies now in affiliation with The Ohio State Medical Association or those that may hereafter be organized in this state, which have adopted principles of organization not in conflict with this constitution and by-laws shall, upon application to the House of Delegates, receive charters from this Association, provided that their Constitution and By-Laws shall have been submitted to the Council and received its approval.	(No amendments recommended for Sec. 1).
	(Two new sections to be inserted and numbered Sec. 2, and Sec. 3).
	SEC. 2. CONSTITUTIONS OF COMPONENT SOCIETIES. Each component society or academy shall have a constitution and by-laws. These shall be in conformity with the Constitution and By-Laws of The Ohio State Medical Association, and a copy thereof shall be transmitted to the headquarters of the Ohio State Medical Association for approval and record.
	SEC. 3. CHANGES IN LOCAL CONSTITUTION OR BY-LAWS. Whenever a component society or academy shall have made a change or amendment in its constitution or by-laws, such changes shall be submitted to the Council of The Ohio State Medical Association for approval, and such changes shall not become effective until such approval shall have been given.
SEC. 2. Only one component medical society shall be chartered in each county.	(Sec. 2 to be renumbered as Sec. 4).

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	(A new section to be added to read as follows): SEC. 5. DATE MEMBERSHIP DUES ARE PAYABLE. The membership dues in all component societies shall be due and payable on or before December 1, preceding the calendar year for which such dues are collectable.
SEC. 3. QUALIFICATIONS. Each county society shall judge of the qualifications of its members, subject to review and final decision by the Council of The Ohio State Medical Association. Every reputable and legally qualified physician who does not practice, nor profess to practice sectarian medicine, and who is a bona fide resident of the same county, shall be eligible for election to membership.	(Section 3 to be renumbered as Section 6 and the first paragraph amended to read as follows): SEC. 6. MEMBERSHIP QUALIFICATIONS. Each component county medical society and academy shall judge of the qualifications of its members, subject to review and final decision by the Council of the Ohio State Medical Association. Every reputable physician who does not practice, nor profess to practice sectarian medicine, who is a bona fide resident of the county, and who possesses the qualifications enumerated in Chapter I of these By-Laws may be considered eligible for election to membership.
A member of a component society whose license has been revoked shall be dropped from membership automatically as of the date of revocation. The Council of The Ohio State Medical Association shall have final authority to expel a member should a component county society fail to do so after being so requested by the Council. Where it is more convenient for a member to attend the meetings of the component county society in an adjoining county, upon request of the society in the county of his residence, his membership may be transferred and accredited to said adjoining county society.	(Paragraphs two and three of this section to read as at present).
	(A new section to be added to Chapter XII, following the new Sec. 6, (at present Sec. 3) to be known as Sec. 7, and to read as follows:) SEC. 7. DISCIPLINARY PROCEDURE. No disciplinary action shall be taken against a member of a component society without affording the opportunity of a hearing. Should such hearing be held, a record thereof shall be kept by the secretary of the component society, to be submitted to the Council of the Ohio State Medical Association in case of appeal to it.
SEC. 4. APPEALS. Any physician who may feel aggrieved by the action of the society of his county in suspending or expelling him, shall have the right to appeal to the Council. A county society shall at all times be permitted to appeal or refer questions involving membership to the Council of The Ohio Medical Association for final determination.	(Sec. 4 to be renumbered as Sec. 8).
SEC. 5. In hearing appeals the Council may admit oral or written evidence as in its judgment will most fairly present the facts, but in the case of every appeal both as a board and as individuals, the Councilors shall, preceding all such hearings, make efforts at conciliation and compromise.	(Sec. 5 to be renumbered as Sec. 9).
SEC. 6. REMOVALS. When a member in good standing in a component county society moves to another county in this state, he shall be given a written certificate of these facts by the secretary of his society, without cost, for transmission to the secretary of the society in the county to which	(Sec. 6 to be renumbered as Sec. 10).

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he moves. Pending his acceptance or rejection by the society in the county to which he removes such members shall be considered to be in good standing in the county society from which he was certified and in The Ohio State Medical Association to the end of the period (respectively) for which his dues have been paid.

SEC. 7. FUNCTION AND DUTIES. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it includes every eligible physician in the county.

SEC. 8. CERTIFICATION OF DELEGATES. At some meeting in advance of the annual session of this Association, each component county society shall elect delegates to represent it in the House of Delegates of this Association, in accordance with Chapter IV, Section 2 of these By-Laws. The secretary of each county society shall send a list of such delegates and alternates to the Executive Secretary of this Association at least thirty days before the annual session. Representation in the House of Delegates shall be contingent on compliance with the foregoing provisions. In the absence of, or the disability or disqualifying of a delegate, his duly certified alternate may be seated in his place.

SEC. 9. ROSTER OF MEMBERS. The secretary of each county society shall keep a roster of its members, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary by Council. He shall send a copy of the program of each county meeting to his district Councilor and to the Executive Secretary.

SEC. 10. AUXILIARY LEGISLATIVE COMMITTEE. Each component society shall appoint or elect one of its members as a member of the auxiliary committee on Public Policy and the county society secretary shall send his name and address at once to the Executive Secretary of The Ohio State Medical Association. The committee on Public Policy of the Ohio State Medical Association shall formulate the duties of this auxiliary committee and supply each member with a copy. The auxiliary committeemen shall be accountable to their county societies and to the Council of The Ohio State Medical Association for prompt response to and continued cooperation with the State Association Committee on Public Policy.

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(Sec. 7 to be renumbered as Sec. 11).

(Sec. 8 to be renumbered as Sec. 12).

(Change words "annual session" to "annual meeting").

(Sec. 9 to be renumbered as Sec. 13).

(Sec. 10 to be renumbered as Sec. 14).

(Two new sections to be added to Chapter XII to read as follows:)

SEC. 15. SPECIFIC DUTIES. The by-laws of each component society shall set forth, specifically, the duties of the several officers and of its executive body (Council or Trustees).

SEC. 16. OFFICIAL RECORDS. The official copy of the constitution and by-laws of each component society shall be kept in a special book provided for that purpose. In it shall be entered all amendments which have been ratified by the Council of the Ohio State Medical Association. It shall contain the signature of each member who is entitled to membership in The Ohio State Medi-

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cal Association, together with the date of his election, decease, resignation or expulsion. It shall be the duty of the secretary to preserve this book and hold it available when required for reference.

CHAPTER XIII.

SECTION 1. AMENDMENTS. These By-Laws may be amended at any annual session of the House of Delegates by a majority vote of the delegates present at that session, if the proposed amendment has been published in *The Journal* two months before the annual session.

SEC. 2. REPEAL. Upon the adoption of this Constitution and these By-Laws, all previous Constitutions and By-Laws are thereby repealed.

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CHAPTER XIII.

(Change words "annual session" to "annual meeting" in Section 1).

(A new section to be inserted between the present Sections 1 and 2 as follows):

SEC. 2. PROCEDURE IN CONFORMITY. When an amendment to these By-Laws has been made, as provided by Sec. 1, it shall be the duty of the Executive Secretary to notify the Secretary of each component society within sixty days after it has become effective. It shall become incumbent upon each component society to make such changes in its by-laws as will bring about conformity to the change in the By-Laws of the Ohio State Medical Association. Written notice of compliance with this provision shall be sent to the headquarters of The Ohio State Medical Association within six months and shall be submitted to the Council for approval.

(Present Section 2 to be renumbered as Section 3).

Respectfully submitted by the Committee on Constitutional Revision,

ALBERT H. FREIBERG, *Chairman.*
JOHN B. ALCORN,
E. R. BRUSH,
C. L. CRUMMER,
F. S. VAN DYKE.

Proposed Narcotic Legislation, Now Pending in Congress, Would Create More Bureaucratic Power Without Apparent Advantages

Every physician and every county medical society or academy of medicine have been emphatically urged by the American Medical Association to register protests with U. S. Senators and Congressmen against enactment of H. R. 9053 and H. R. 9054, companion bills introduced in the United States House of Representatives by Representative Porter of Pennsylvania, which provide for drastic revision of the present system of issuing, suspending and revoking of narcotic licenses.

In a leading editorial in the February 8 issue of the *American Medical Association Journal*, the provisions of the Porter bills are analyzed and the reasons why they should be rejected set forth.

It is pointed out that medical leaders, especially those in close touch with federal legislation, have denounced these measures as unnecessary, ill-advised, costly, an unnecessary duplication of effort and detail placed upon physicians, pharmacists, dentists and veterinarians, and another attempt to extend the bureaucratic power of the federal government.

The A.M.A. editorial declares that under H. R. 9054, the United States Commissioner of Prohibition is authorized to prescribe regulations governing the issuing, suspension and revocation of narcotic licenses to physicians and their allied professions and that the Commissioner is not bound or restricted in any way by any license of any kind that any state may have issued. It is pointed out that since the proposed law does not amend or expressly repeal the Harrison Narcotic Act, licenses from the Commissioner of Prohibition will not relieve physicians of the obligation to register annually with the Commissioner of Internal Revenue, to pay an annual narcotic tax, and to comply with all the conditions imposed by that act.

Under H. R. 9054, it is charged, no one who has ever been convicted of any offense against a Federal or State law relating to narcotic drugs, regardless of how trivial that offense may have been, may ever be licensed under the proposed act, and if his license is revoked, such licentiate can never thereafter use narcotic drugs professionally.

It is further pointed out that under the proposal, no direction, or even suggestion, is made as to who may or may not be licensed; what conditions are to govern the issuance, suspension and revocation of license; how long a period or how great an area a single license is to cover; what limitations are to be imposed on the character and amount of narcotic drugs that a licentiate may use; what records are to be kept, or what reports are to be made. All these matters are to be entirely within the discretion of the Commissioner, as he may determine and control by regulations, the *A.M.A. Journal* declares.

In addition, the analysis of H. R. 9054 makes clear that super-bureaucratic power is lodged with the Commissioner in the rejection of an application for a license; that no notice of definite charges is provided in the bill; that the Commissioner may merely call upon the applicant to show cause why a license should be issued, the person who must defend his rights having no voice in determining the place of hearing, and that no method is provided by which he can cause a hearing to be transferred. Whether the hearing shall be public or private is apparently left to the person who holds it.

The measure also provides that any officer or employe may be assigned by the Commissioner to hold such a hearing, although the Commissioner, himself, makes the decision, even though he may never have seen the applicant, interviewed the witnesses, or reviewed the record. In case an appeal is made to the court, it is cited that there is no provision for suspending the operation of the Commissioner's decision pending adjudication by the Court.

The A.M.A. article states that in H. R. 9053, the companion bill of H. R. 9054, it is proposed to transfer from the Commissioner of Prohibition to a proposed commissioner of narcotics all federal functions with respect to narcotics now vested in the Commissioner of Prohibition. It proposes to abolish the Federal Narcotics Control Board and to vest all authority and power of that Board in the proposed commissioner of narcotics. It is charged that under the bill, the division of narcotics, as at present constituted, is magnified into a separate bureau of narcotics, with vague autocratic and arbitrary authority.

Contending that there is nothing in such a transfer, recreation and extension of authority to indicate in any way an increase in the efficiency of narcotic control, the *A.M.A. Journal* editorial declared:

"The legislation proposed is in complete harmony with the prevailing tendency to substitute a powerful bureaucracy in Washington for the authority of the states. If the Porter bills become law, a physician, dentist, veterinarian or pharmacist authorized by a state to practice his profession cannot use narcotic drugs in connection with his work until a Washington bureau chief, under rules and regulations of his own making, says that he may. Autocrats of such a type have no place in the American scheme of government. * * * In the face of such a menace and with an understanding of the type of propaganda that will be behind the Porter bills, all the power that an intelligent people and particularly the medical profession can wield must be mustered to the defense of the right of physicians and related pro-

fessions to practice for the good of man without further bureaucratic molestation."

Leaders of the medical profession who have studied the proposals point out that the medical profession always has vigorously opposed improper and illegal traffic in narcotic drugs and always has actively cooperated in laws and regulations designed to stamp out this illicit traffic, but that there is no indication that the Porter proposals would in any way better the present system of narcotic administration or assist in placing greater restrictions on illicit narcotics.

Ohio physicians and county medical societies who are planning to protest against the Porter bills should register their objections with Senators Fess and McCulloch and members of the Ohio delegation in the House of Representatives, especially Representative Morgan, a member of the Committee on Foreign Affairs to which H. R. 9054 has been referred, and Representative Kearns, a member of the Committee on Ways and Means before which H. R. 9053 is pending.

Legal Problems of Hospital Authority, Public Control, Osteopaths and Limited Practitioners

Osteopathic physicians of Lakewood, Ohio, have demanded from the Lakewood City Council that they be permitted to treat patients in the new $1,000,000 Lakewood City Hospital, to be financed by the city, and that they be represented on the Board of Trustees of the institution.

The agitation, according to newspaper reports, has raised questions relative to the authority vested in the manager of a city hospital in the matter of passing on the qualifications of the medical and surgical staff of a city-owned institution and as to the professional standing of an institution which permits any but licensed graduates of reputable medical schools to treat patients confined there.

The General Code of Ohio (Section 4035) specifically points out that the management and control of a municipal hospital is vested in the director of public safety of the municipality, who, subject to the ordinances of the City Council, "shall establish such rules for its government and the admission of such persons to its privileges as he deems expedient."

Legal authorities contend that under this section of the Ohio Laws, the city council, through the safety director, has the authority to make reasonable rules governing the qualifications of those who seek to practice in the hospital to enable the institution to fulfill in every way its obligation to the community by maintaining the highest standard possible for the hospital and its services.

In order to insure the sick and injured the best possible hospitalization and care at the hands of those fully qualified and competent to treat all ailments and injuries, the Council on Medical Education and Hospitals of the American Medical Association has for a decade made an annual survey of all hospitals in the country, grading each institution and judging its qualifications to serve the people of its community.

The Council does not claim to have, nor does it assume any legal authority over any hospital, but recognizes clearly that the officers in charge of such institutions have the unquestioned right to conduct the hospital in any way they deem wise. However, if a hospital desires to have the Council's endorsement and desires to be recognized as an institution registered and approved by the American Medical Association, it must comply with certain principles set forth by the Council, and deemed by it to be essential for such endorsement.

Under the principles prepared by the Council, a hospital seeking admission to the Register and desiring to be recognized as one of high standards and qualifications must have a staff made up of one or more properly qualified physicians who shall be graduates of reputable medical schools, and *all physicians treating patients in the hospital must be so qualified.*

This ruling in effect excludes from the A.M.A. Hospital Register any institution which permits osteopaths or practitioners in the limited branches of medicine to treat patients in the hospital.

Numerous court decisions concerning the legality of excluding osteopaths and limited practitioners from the privileges of a public hospital have been handed down within recent years.

The United States Supreme Court in the case of Hyman v. Galveston held that the board of commissioners of the City of Galveston could lawfully exclude osteopaths from a hospital maintained by the city.

In an injunction suit carried on appeal to the Supreme Court of Colorado, that court held that the board of commissioners of Weld County, Colorado, had sole authority over the operation of that county's hospital and could restrict membership on the staff of the institution. The Colorado Court contended that the resolution of the commissioners excluding all practitioners from the hospital except those who are graduates from regularly accredited medical colleges in good standing "could be justified on the ground that if the right to practice in the county hospital was accorded to all the different schools of medicine there would be constant jealousy and dissatisfaction between the different schools which might greatly lessen the usefulness of the public hospital."

A recent decision handed down by the Common Pleas Court of Hannibal, Missouri, upheld the Board of Trustees of a privately endowed hospital whose title is vested in a municipality in refusing to permit osteopathic physicians to treat patients at the institution. Commenting on the decision of Judge C. T. Hays in the case, the *Missouri Medical Journal* said:

"When, we wonder, will irregular, sectarian, or the limited practitioner of the healing art learn that there is no backdoor entrance through which he can approach the plane occupied only by those possessing the degree of Doctor of Medicine. Statutes may confer, and do confer, certain rights and privileges upon those willing to offer themselves as healers of the sick with a limited amount of learning and incomplete knowledge of the human body and its diseases, but such statutes do not and never can make such persons real physicians nor can such persons by an artifice long deceive the people concerning their limited knowledge and ability to treat the sick."

Fortified with the legal opinions cited and many others on record but not discussed here, the City Council of Lakewood apparently need have little fear as to its authority and power to say who shall or who shall not enjoy the privileges of the new Lakewood Hospital.

However, there are two important questions which it must answer before making its decision, namely:

1. Does the Lakewood City Hospital wish to be admitted to the list of hospitals registered by the American Medical Association and be recognized as an institution of high-standing in the hospital field? If so, its staff must consist entirely of graduates of reputable medical schools.

2. Does the Lakewood City Hospital wish to fulfill its obligations to the community by offering competent service and the best possible treatment to its patients or does it wish to jeopardize the health and lives of its clients by permitting them to be treated by those unqualified to treat all diseases and possessing only a limited knowledge of the human body and of ways to administer to human ailments?

The correct answer of the Lakewood City Council to these questions and to those who have petitioned for the right to practice in the hospital is obvious.

Beware of Swindlers

Swindlers of several varieties, who list professional men, especially doctors and dentists, among their most lucrative victims, are still at work in Ohio and other parts of the country despite efforts of authorities to put an end to their gyp games.

Ohio physicians were warned in the January issue of *The Journal*, Page 58, about several imposters who have been obtaining money from Ohio physicians by working the "father and son" or "classmates" rackets.

In the February 15 issue of *The Literary Digest*, a warning against fake magazine solicitors was published, with the advice that no money be paid to strangers unless they show definite written and signed authority of the publisher to take subscriptions and collect payment therefor. According to that publication, doctors and dentists are being approached by a swindler calling himself Parsons, Hill, McGuire, Holms, Browning, Watkins, Holland, Evis, Carlson, Covington, Deleon or Draper and described as follows Age, 40 years; weight, 150 pounds; height, 5 ft. 8 inches; hair, brown; eyes, gray. It is pointed out that he sometimes claims to represent and impersonates Mr. W. S. Woods, editor of *The Literary Digest*.

There are undoubtedly other swindlers who have found the magazine subscription racket a productive one, so physicians should be cautious in dealing with those representing themselves as agents of any publishing houses.

A recent issue of the Journal of the *American Medical Association* published a warning from a manufacturer of ultra-violet lamps in Chicago concerning a former individual dealer who has been going among doctors in Kentucky, Southern Ohio and Indiana, asking the loan of their lamps so he could make immediate delivery on orders to some other doctor, and promising, as soon as his lamps arrive, to replace the borrowed lamps with new ones. Obviously those who have been duped by this swindler are still waiting for the promised new lamp, as well as the lamp which they loaned.

New outbreaks of the "father and son" game also have been reported in other states.

Physicians are advised to apply the old advice, "before you invest, investigate" to all dealings where money is involved. Take care concerning all strangers with whom you have business dealings. Examine and verify credentials shown to you. Hesitate and *investigate* before signing and turning over to strangers, checks or any document, contract or other paper.

A further decline in lead poisoning, as indicated by the death rate, is revealed in statistics just completed by the Bureau of Labor Statistics, U. S. Department of Labor, for the period ending December 31, 1927. The figures show that in 1927 there were 135 deaths from lead poisoning in the registration area of the nation, as compared with 142 in 1925 and 144 in 1926. About 50 per cent of the deaths were among painters. Five of the deaths were among children, who were believed to have contracted the fatal poisoning by eating paint from cribs or toys.

Legal Opinions on Privileged Communications, Hospital Records, X-Ray Films, etc.

Some interesting points concerning the legal status of hospital records were discussed recently in a series of letters between the New York Academy of Medicine and the Bureau of Legal Medicine and Legislation of the American Medical Association, following a request for such information sent the New York Academy by the Neurological Institute of New York City.

In a recent *Bulletin of the New York Academy of Medicine*, the questions asked and the answers from the A. M. A. Bureau are listed, throwing much light on some of the complex legal problems which physicians and hospitals are forced to face.

Answering the question: "How much of the clinical record on ward patients is subject to subpoena by the Courts?" the Bureau of Legal Medicine and Legislation stated that there seems to be no basis for drawing a distinction between the right of the courts to subpoena the clinical records of ward patients and the right of the court to subpoena the clinical records of private patients. The record of either class may be subpoenaed so far as such records are material and pertinent to the issues before the court, it is pointed out.

"Probably this is true with respect even to records covered by the statutes forbidding the introduction of privileged communications in evidence, even though such records could not be admitted in evidence after they had been produced in court in response to the subpoena," the Bureau contends.

It is suggested that the proper course in such cases would be for the hospital official subpoenaed to produce the records and leave the judge to determine whether they are or are not admissible.

In answer to the question: "Are any of the records contained in the chart of the patient considered as given in confidence, and is such confidence protected by the courts?" the Bureau stated that as a general rule where the information record on a chart represents a privileged communication between the physician and the patient, within the meaning of the statute governing privileged communications in the jurisdiction where the question arises, and if the patient has not expressly or by implication waived his privilege of secrecy, the record will to that extent be regarded as privileged.

Another question asked was: "Are the records of private patients considered to be the property of the private physician taking care of them in the hospitals, or are the records considered to be the property of the hospital?"

In response to this query, the Bureau pointed out that so far as is known no court has passed on the ownership of the clinical records of hospital patients, either of private patients or of any other class. It is stated that the matter of ownership might be governed by express agreement in any particular case, provided the agreement was entered into before the patient entered the hospital. In the absence of an express agreement it is presumably governed by the rules of the hospital, and in the absence of an express agreement and of hospital rules, the courts would probably follow the established universal or near universal custom with respect to the manner, it is contended.

The Bureau declares that this custom would probably constitute the hospital as owner of such records as trustees for the benefit of the patient, and that there is much doubt as to the right of the attending physician to the records after he has discontinued attendance on the patient unless there is some express agreement giving him that right.

A fourth question asked was: "What parts of these records are considered to be given in confidence and therefore not subject to legal review or to be used in evidence?"

The extent to which the recorded data are protected from disclosure in court depends on the law governing privileged communications in the jurisdiction where an effort is being made to compel such disclosure, the Bureau believes.

"Are *X*-ray films taken by private patients considered to be a part of the hospital record, or are they the property of the private patients?" was another query answered by the A. M. A. Bureau. It was contended that roentgenograms of hospital patients taken in the course of diagnosis and treatment in the hospital are a part of the hospital records, although court opinions on this point are lacking. The opinion is expressed that such records can reasonably be called the property of the hospital.

Work on New State Institution to Proceed

New bids for construction work on the new Institution for Feeble-Minded at Apple Creek, Wayne County, will be asked by the State Department of Public Welfare and every effort will be made to have the buildings actually underway by spring, according to a recent announcement of State Welfare Director H. H. Griswold.

Work on the proposed institution has been held up for several months by an injunction suit, granted by the Franklin County Common Pleas Court and sustained by the Franklin County Court of Appeals, following the filing of charges that the contract for the work was invalid because it was awarded on alternate bids and that money for the work could not be appropriated in a lump sum, as done by the last Legislature.

The Court of Appeals sustained the injunction on the grounds that the bids had been illegal, but dismissed the charge that the Legislature was acting illegally in making lump sum appropriations for the work.

Financial and Legal Problems of Public Employes in Workmen's Compensation Fund

A strenuous effort undoubtedly will be made to have the Eighty-Ninth General Assembly, which convenes early in 1931, amend the Ohio Workmen's Compensation Law to enable the State Industrial Commission to fix the premium rates charged counties for upkeep of the compensation funds for public employes on an actuarial basis as is now done with regard to private employers.

The necessity for a revision of the law was demonstrated within the past month when disabled public employes or beneficiaries of public employes in almost half of the counties of the state faced the possibility of being barred indefinitely from participating in the state compensation fund.

Pursuant to mandate handed down by the Ohio Supreme Court, the State Industrial Commission late in January suspended payments to public employes or their beneficiaries of 27 counties and announced that undoubtedly a dozen more counties would be included in the list within a few months. The order also would have held up payments on medical, surgical, hospital and nursing fee bills.

Action of the Commission came after the Supreme Court had held that each county, including its several taxing districts, is required under the present Workmen's Compensation Law to contribute to the state compensation fund in sufficient amount to meet the probable disbursements from the fund to public employes and their beneficiaries in that county, and that the fund contributed by each county must be kept separate and intact.

The ruling by the court was interpreted by the Commission to mean that the fund of each county must be kept solvent to meet payments to public employes and that money from the general fund for public employes could not be used in meeting payments in counties whose funds were not sufficient to meet compensation demands. So, payments to public employes in 27 counties whose separate funds were insolvent were suspended.

Following many conferences on ways to meet this crisis, Attorney General Bettman rendered an opinion to the Commission holding that continuation of payments out of the general county fund was legal as long as the general fund held out or until remedial legislation was passed, but in effect held that no money from the general fund contributed by private employers could be used in meeting payments to public employes, as stated in the Supreme Court's mandate. The order suspending payments was rescinded following Mr. Bettman's ruling.

Attorney General Bettman in his opinion emphasized the fact that his ruling was but a temporary measure to meet the impending crisis and that "it is expected that the next legislature, realizing the gravity of the situation, will amend the law and remove the arbitrary limits so that the contribution to the fund by public employes can be placed on an actuarial or insurance basis". He pointed out that the Industrial Commission is charged by law with the duty of making payment of compensation to public employes in counties which have paid the premium required by law and that the fact that certain counties have not paid enough into the fund to meet disbursements in those counties does not relieve the state of its duty of meeting payments as long as the general fund of public employes is solvent.

The following counties would have been affected by the order barring further payments: Auglaize, Champaign, Darke, Defiance, Delaware, Franklin, Fulton, Gallia, Greene, Harrison, Jackson, Knox, Lawrence, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Richland, Ross, Seneca, Shelby, Warren, Wood and Wyandot.

It was pointed out by the Commission in explaining its action that the law requires each county to pay into the state fund but 3 per cent of its annual public payroll but that public employment is much more hazardous in some counties than others, which means that the premiums in some counties are not sufficient to meet disbursements.

Overdrafts and disbursements exceeding premiums in the 27 counties cited totaled $217,092.16. This amount and future payments in these counties will now be met from the general public employe fund, pursuant to the Attorney General's ruling.

It was pointed out to state officials by interested individuals and groups that the situation could have been averted had the Eighty-Eighth General Assembly passed House Bill 398 which would have permitted the State Industrial Commission to fix county premium rates on an acturial basis. The bill cited did not reach a vote in the House of Representatives where it originated.

In a statement rescinding its order stopping payments to public employes, the Commission explained that payments will be made as long as there remains a cash balance in the fund contributed by public employers but "unless there is remedial action by the next Legislature the Commission will be powerless to pay compensation claims in the counties having an overdraft in their compensation payments through the year 1931."

The United States Civil Service Commission has announced open competitive examinations for positions of medical officer, associate medical officer and assistant medical officer in U. S. Veterans' Bureau hospitals, the U. S. Public Health Service and the Indian service. Applications will be received until June 30.

NEWS NOTES of OHIO

Cincinnati—City Manager Sherrill and officials at the University of Cincinnati have under consideration a plan whereby Dr. A. C. Bachmeyer would be relieved of active duty as superintendent at the Cincinnati General Hospital so he can devote more of his time to his duties as dean of the College of Medicine at the University. Dr. Bachmeyer would continue as coordinator and supervisor of medical affairs at the hospital but administrative work would be placed in the hands of a new general superintendent.

Cleveland—Dr. Carl F. Ulrich, demonstrator in pediatrics, Western Reserve University, School of Medicine, has been awarded a fellowship by the National Committee for Mental Hygiene. He will devote a year to research work in psychiatry, spending most of this period at the Pennsylvania Hospital, Philadelphia.

Columbus—Dr. H. H. Dorr, chief medical examiner for the State Industrial Commission, has been elected vice president of the Columbus League for Hard of Hearing.

Dover—Dr. Hobart R. Hoerger, formerly of Cincinnati, has opened offices at Stonecreek, near here.

Cleveland—Dr Royal G. Grossman has been appointed head of the Cuyahoga County Psychiatric Clinic.

Urbana—Local physicians have refused a proposition of the Urbana City Council whereby one physician would be paid monthly for caring for the indigent, and have rendered a counter-proposal whereby the work would be divided among all the physicians to be paid for by the city on a fee basis.

Cambridge—Announcement has been made of the marriage of Miss Frances M. Hunter of New Madrid, Missouri, and Dr. Paul O. Huth of this city.

Columbus—Dr. and Mrs. I. B. Harris suffered minor injuries in an automobile collision north of Marion.

Alliance—Dr. Konrade Birkhaug, professor of biology, Rochester University, College of Medicine, addressed the study body of Mount Union College recently on "The Spirit and Service of Medical Science".

Zanesville—The progress of scientific medicine was analyzed recently by Dr. H. T. Sutton in an address before the Muskingum County Pioneer and Historical Society.

Dayton—Election of Dr. Franklin L. Shively as a member of the board of directors of the General Alumni Association of Northwestern University has been announced.

Cleveland—Use of the autopsy rooms at Western Reserve University, School of Medicine, has been offered the county commissioners until the county builds a new morgue and a pathological clinic.

Steubenville—Dr. I. C. Foster has been appointed physician at the county jail and county infirmary.

Columbus—A group of medical students at Ohio State University attended an anti-vaccination meeting at a downtown hotel and defended vaccination during a discussion of the subject, despite objections from those sponsoring the meeting.

Columbus—Dr. Bruce E. Lindsey has been appointed medical examiner for aviators connected with the local divisions of the Curtis-Wright Flying Service and the Transcontinental Air Transport Co.

Toledo—Two gunmen, one of whom had been wounded, entered the office of Dr. J. V. Pilliod recently and threatened to kill him unless he treated the wounded man. Dr. Pilliod escaped on the pretext of going to a nearby drug store for bandages and notified police. The men fled while Dr. Pilliod was calling police.

Middletown—Dr. W. H. Williams has returned from four-months post-graduate work in Vienna.

Cleveland—Dr.. W. T. Corlett has been elected president of the Cleveland Medical Library Association. Other officers elected were: Dr. C. L. Cummer, chairman of the board; Dr. C. W. Stone, director of finance; Dr. C. H. Lenhart, director of the Allen Memorial Library; Dr. Howard Dittrick, director of biography; Dr. A. A. Jenkins, director of maintenance; Dr. L. A. Pomeroy, secretary, and Dr. F. S. Gibson, treasurer.

Wauseon—Dr. W. H. Maddox has gone to New Orleans to take special work in radiology at Tulane University.

Fremont—County commissioners have selected Dr. C. L. Fox as physician at the County Home for the ensuing year.

Mansfield—Dr. Barton W. Johnson, formerly of the Meridian Sanitarium, Meridian, Mississippi, has been named roentgenologist and pathologist at the Mansfield General Hospital, succeeding Dr. Samuel Richman who has moved to Elgin, Ill.

Cincinnati—The Cincinnati Obstetrics Society has elected Dr. F. A. S. Kautz president for the coming year. He is attending obstetrician at the Jewish and Good Samaritan hospitals.

Marietta—Dr. E. W. LeFever is recovering from an attack of undulant fever.

Lima—Forty members of the Lima Travel

Club, composed of members of the Allen County Medical Society, visited the Mayo Hospital, Rochester, Minn., and the clinical meeting of the American College of Physicians at Minneapolis, the week of February 9-15.

Cincinnati—Dr. J. Henry Schroeder and Dr. William J. Topmoeller have been designated by the U. S. Department of Commerce as official examiners of commercial air pilots in this district.

Columbus—Dr. Warren G. Harding, II, nephew of the late President Harding and son of Dr. George T. Harding, Jr., of Worthington, won first place in the last examination given by the National Board of Medical Examiners.

Alliance—A history of medicine was sketched for the Alliance Kiwanis Club recently by Dr. George L. King, Jr.

Martins Ferry—Dr. John H. Nauman, formerly of Detroit, has opened offices for general practice here.

Cincinnati—Dr. T. A. Ratliff was presented a cane by the Co-ordinating Committee of the Cincinnati Public Health Federation at a recent luncheon given in his honor. Dr. Ratliff recently retired as president of the Federation.

Cleveland—More than 500 Cleveland physicians cooperated in the periodic physical examination campaign held during February by the Cleveland Academy of Medicine and the Cleveland Health Council.

Chagrin Falls—Dr. Frank S. Pomeroy has resigned as coroner of Geauga County.

Ripley—Dr. George P. Tyler, Jr., a major in the Medical Reserve Corps, has been notified of his appointment as chief of medical service with the 77th Station Hospital, Cleveland, in case of mobilization.

Cleveland—Dr. Henry G. Schumacher, director of the Cleveland Child Guidance Clinic, has been named a member of one of the sub-committees of the White House Conference on Child Health and Protection.

Dayton—Dr. H. Grant Marthens has returned from post-graduate work in New York City.

Tiffin—Dr. and Mrs. E. H. Porter and their daughter have left for Vienna, via the Mediterranean and Cairo. Dr. Porter will attend eye clinics while in Vienna.

Akron—The Doctors' Orchestra of Akron played for the first time for a non-medical audience on February 19 when it broadcast a program over Station WFJC of this city. The orchestra ,composed of 37 members of the medical and dental professions, opened its series of hospital concerts, February 27, at St. Thomas Hospital. Dr. A. S. McCormick is director of the group. Dr. D. H. Henninger and H. L. Arbuckle are concert masters.

Cleveland—Approximately 500 physicians attended the memorial services held February 9 at the Amasa Stone Memorial Chapel, Western Reserve University, in honor of the late Dr. Carl A. Hamann. Physicians who took part in the services were: Drs. John P. Sawyer, V. C. Rowland, Clyde L. Cummer, Torald Sollmann, J. E. Hallisy, Elliott C. Cutler, Roy W. Scott, Fred C. Oldenburg, Oscar T. Thomas, L. A. Pomeroy, George W. Crile and Paul J. Aufderheide.

Columbus—Dr. Andre Crotti and Dr. James F. Baldwin were among those elected directors of the Columbus Cancer Clinic.

Columbus—Dr. Joseph Price has donated a debating and oratory scholarship at Capital University.

Canton—Dr. Sylvester L. Agnone has been appointed city physician.

Cleveland—Dr. Louis N. Katz has resigned as assistant professor of physiology at the School of Medicine, Western Reserve University, and as consulting cardiologist at St. Luke's Hospital, to accept the position as physiologist and director of cardio-vascular research at the Michael Reese Hospital, Chicago.

Xenia—Annual banquet and get-together of the consulting medical and surgical staffs of the Ohio Soldiers' and Sailors' Orphans' Home was held February 12.

Fremont—The Democratic Executive Committee has endorsed Dr. A. F. Schultz for election as councilman-at-large.

Coshocton—Dr. W. H. Keenan, former captain in the medical corps, U.S.A., is recovering from an operation for double hernia resulting from his service overseas.

Columbus—Board of Trustees of Ohio State University has announced the appointment of Dr. Charles A. Doan of the Rockefeller Institute, New York City, as chairman of the new department of medical and surgical research, with the rank of professor. Dr. Doan is a graduate of Hiram College and Johns Hopkins Medical School. He had been on the staff of the Rockefeller Institute for the past five years.

Cleveland—A complete graduate catalogue of the School of Medicine, Western Reserve University, listing 7260 persons who have received instruction at the school since 1843 when the Willoughby Medical College moved to Cleveland, has been issued. The book was edited by Dr. Frederick C. Waite, professor of histology and embryology at Western Reserve, from records he had compiled.

Painesville—Dr. and Mrs. W. O. Ellis are enjoying a six weeks vacation in the Southern States and California.

Painesville—Dr. and Mrs. M. H. Carmody left January 9 for a month's cruise of the West Indies.

Deaths in Ohio

Harry G. Blaine, M.D., Williard; Indiana Eclectic Medical College, Indianapolis, 1882; Toledo Medical College, 1886; aged 71; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 31 of cerebral hemorrhage. Dr. Blaine had practiced more than fifty years, and was located in Attica and later in Toledo before moving to Williard in 1904. In 1915, he founded the Williard hospital. He is survived by three sons, three sisters and a brother.

Henry C. Brison, M.D., Millersport; Medical College of Ohio, Cincinnati, 1874; aged 81; died January 31. Dr. Brison had practiced in Fairfield county for fifty years before his retirement a few years ago. Surviving him are three daughters, two sons, and two brothers.

Samuel Clayton Caldwell, M.D., Murray City; Starling-Ohio Medical College, 1912; aged 42; member of the Ohio State Medical Association and the American Medical Association; died February 1 at the home of his mother in Alfred, Ohio. Dr. Caldwell was a veteran of the World War, and spent two years in service overseas. Since his discharge, he had practiced at Toronto and Murray City, and previous to the war, was physician at the Boys Industrial School at Lancaster. Surviving him are his widow, his mother, three sisters and a brother.

Amos Ewing, M.D., Columbus; Western Reserve University School of Medicine, 1869; aged 94; died January 19. He practiced for nearly fifty years at Greenwich, before retirement several years ago. He was a veteran of the Civil War. Three daughters survive him.

George M. Kerr, M.D., West Jefferson; Ohio State University, College of Medicine, Columbus, aged 46; member of the Ohio State Medical Association and the American Medical Association; died February 1 at Mt. Carmel Hospital, Columbus, where he had been removed a week before his death. Dr. Kerr had been in ill health for several months and had spent part of the winter at Fort Lauderdale, Florida. He was a veteran of the World War, and following his return from service, opened an office and emergency hospital in West Jefferson. He had practiced seven years at Lilly Chapel before enlisting in the Medical Corps. He had served three terms in the village council at West Jefferson, and was active in several local clubs. Surviving him are his widow, one daughter, one brother and one sister.

Joseph M. Lewis, M.D., Cleveland; University of Wooster, Medical Department, Cleveland, 1865; aged 92; former member of the Ohio State Medical Association; died January 15. Dr. Lewis practiced in Cleveland from 1865 until his retirement in 1920, and for ten years following his graduation he served as superintendent at Newburg Sanitarium.

Roy John Moore, M.D., Youngstown; University of Pittsburgh, School of Medicine, 1912; aged 52; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 3 of pneumonia. Dr. Moore had practiced in Youngstown for seventeen years. He is survived by his widow and one son; four brothers and one sister.

Jerome T. Quirk, M.D., Dayton; George Washington University Medical School, Washington, D. C., 1917; aged 47; member of the Ohio State Medical Association and the American Medical Association; died January 21 of pneumonia. Dr. Quirk was a veteran of the World War, and was three times wounded while overseas. Since 1925 he has been stationed at the National Military home in charge of the eye, ear, nose and throat clinic. He is survived by his widow, one daughter. two brothers and two sisters.

Charles L. Rosengrant, M.D., Hendrysburg; Columbus Medical College, 1890; aged 69; former member of the Ohio State Medical Association; died January 25 of heart disease. Dr. Rosengrant had spent nearly half a century in active practice in Belmont county and Hendrysburg. Surviving him are his widow, one brother and two sisters.

Charles W. Skeggs, M.D., Green Springs; Medical College of Ohio, Cincinnati, 1879; aged 76; died February 1 from infirmities. Dr. Skeggs had practiced in Green Springs for 46 years. He is survived by his widow, one son and one daughter.

Ota Mafry Smith, M.D., Columbus; Ohio Medical University, Columbus, 1898; aged 59; died February 10 of carcinoma. Dr. Smith practiced in Columbus from 1912 until forced to retire three years ago because of illness. She is survived by a daughter, two sisters and one brother.

Joseph Philip Henry Stedem. M.D., Newark; Jefferson Medical College, Philadelphia, 1888; aged 74; member of the Ohio State Medical Association and Fellow of the American Medical Association; died February 7 from a heart attack. Dr. Stedem had practiced in Newark for many years. He had served as delegate from Licking County Medical Society to the annual meeting of the State Association for several sessions. One son, Dr. Edwin J. Stedem, Columbus, survives him.

Herman D. Streett, M.D., Columbus; Kansas City Hospital College of Medicine, Kansas City, Missouri, 1885; aged 65; died January 31 of carcinoma. He had practiced in Columbus since his graduation. Surviving him are his widow, two brothers and a sister.

Robert T. Tarr, M.D., Cleveland; Cleveland College of Physicians and Surgeons, 1897; aged 55; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 24 after a long illness. Dr. Tarr had practiced in Cleveland since his graduation. and in 1923 was elected president of Glenville Hospital. He retired from active practice three years ago. His widow survives him.

James L. Tracy, M.D., Toledo; Cincinnati College of Medicine and Surgery, 1877; aged 80; died January 15. Dr. Tracy had practiced in Toledo for 45 years. He retired from active practice last year. Surviving him are his widow and a daughter.

Thomas C. Young, M.D., Cleveland; Western Reserve University School of Medicine, 1903; aged 59; member of the Ohio State Medical Association and Fellow of the American Medical Association; died January 20. Dr. Young had practiced in Cleveland since his graduation.

Augustus M. Ziegler, M.D., Mingo; Starling Medical College; 1881; aged 79; former member of the Ohio State Medical Association; died January 28 of heart disease. Dr. Ziegler had practiced in Champaign county for nearly fifty years. Before entering medical college, he taught in the public schools in Muskingum County. He is survived by his widow, three daughters, one son, and one step-daughter.

KNOWN IN OHIO

Byron W. Dawley, M.D., Long Beach, California; Kentucky School of Medicine, Louisville, 1891; The General Medical College, Chicago, 1897; aged 69; died January 9 from injuries received in an automobile wreck. Dr. Dawley was former head of the East Side Hospital, Toledo, and had practiced in Toledo until four years ago when he moved to California. He is survived by his widow.

Claude A. Latham, M.D., Huntington, West Virginia; Jefferson Medical College of Philadelphia, 1922; member of the West Virginia State Medical Association and the American Medical Association; died January 20 of pneumonia. Dr. Latham was a former intern at Grant Hospital, Columbus, and at the time of his death, was chief of staff of St. Mary's Hospital at Huntington. His widow survives him.

Lawrence K. McCafferty, M.D., New York; Johns Hopkins University, School of Medicine, Baltimore, 1916; aged 39; Fellow of the American Medical Association; died in St. Vincent's Hospital, New York, January 20, from a fractured skull suffered when he slipped while getting out of a bathtub. Dr. McCafferty was adjunct professor of dermatology at New York Polyclinic Medical School. He formerly resided in Chillicothe, and was a graduate of Kenyon College. He is a son of Dr. C. S. McCafferty, of Columbus.

Addison W. McCoy, M.D., Wichita, Kansas; Rush Medical College, University of Chicago, 1874; died January 4 at the home of his daughter, Mrs. Elizabeth Newman, Norwood, Ohio, where he had made his home for the last three years.

New Code of Ethics for Ohio Pharmacists

After many conferences and much study, the Council of the Ohio State Pharmaceutical Association has adopted the following code of ethics to govern the profession of pharmacy in Ohio. These sections dealing with relationship to physicians are of special interest:

PREAMBLE

A profession that has for its principal object the service it can render to humanity should recognize any financial reward only as a secondary consideration.

PHARMACY A PROFESSION

The members of the Ohio State Pharmaceutical Association are committed to the following set of rules governing their relationship to the public, to the profession of medicine and to themselves.

When an individual chooses Pharmacy as his profession, he assumes an obligation to conduct himself in accordance with the ideals of true Pharmacy and is willing to accept as a guide these ideals as set forth herewith.

CHAPTER I

THE DUTIES OF THE PHARMACIST TO THE PUBLIC

Section 1. The Pharmacist should always be mindful of the years of study and training required of him to make him worthy of the confidence of the public.

Sec. 2. The Pharmacist shall not deviate from the procedure that he knows to be right. He should cultivate and maintain the confidence of the public and be considerate to all.

Sec. 3. The Pharmacist should have such standard books, journals and laws on pharmacy as will guide him in the proper conduct of his profession. His pharmacy shall be equipped with such utensils, devices and machinery as will quickly, economically and efficiently assist him in the compounding and dispensing of medicines.

Sec. 4. The drug store should have a pharmacy atmosphere and should ever be in such condition that all or any part thereof may be open for critical inspection. The prescription counter and its contents especially should exhibit the thoughtful care that its importance deserves.

Sec. 5. Proprietary, secret or non-secret medicinal preparations should be sold only on demand. The Pharmacist should not recommend them for the cure or relief of incurable diseases.

Sec. 6. Narcotic drugs, intoxicating medicines and poisons should be kept, sold and delivered only according to law. The sale of such drugs and medicines not prohibited by law, the effect of which may cause harm or habit forming, should be discouraged.

Sec. 7. The Pharmacist shall sell or exchange his goods and service at a profit which will benefit all parties connected with such sale or exchange.

CHAPTER II

THE DUTIES OF THE PHARMACIST TO THE PHYSICIAN

Section 1. The Pharmacist should encourage a more intimate relation with the physician and through better understanding realize where the prescribing and dispensing of medicines should end.

Sec. 2. The order of the Physician, written or implied in the regular practice of his profession, shall be strictly followed by the Pharmacist.

Sec. 3. There shall be such reciprocal relations existing between the Pharmacist and the Physician that no material fee or bonus will be exchanged.

CHAPTER III

THE DUTIES OF THE PHARMACISTS TO EACH OTHER AND TO ALL OTHER PROFESSIONS

Section 1. The Pharmacist should encourage the acquaintance and support of chemists, dentists, faculty members of colleges, administrative officers of the law and of leaders of civic groups.

Sec. 2. The Pharmacist should investigate and lend his aid to those in distress and to his associate Pharmacists who may have been wrongfully accused of violating the laws controlling pharmacy.

Sec. 3. The Pharmacist shall so conduct himself and his pharmacy in honesty, dignity, courtesy and high ideals so that others will find it wise, profitable and conducive to contentment and happiness to follow his example.

Sec. 4. The Pharmacist should practice the Golden Rule: "All Things Whatsoever Ye Would That Man Should Do Unto You, Do Ye Even Unto Them." The Pharmacist shall accept the responsibility of service to the public and discharge this duty in such manner that shall be elevated and the public benefitted thereby.

PUBLIC HEALTH NOTES

The year 1929 was among the three ranking years since 1920 for incidence of notifiable diseases, according to a report recently compiled by the State Department of Health.

In 1920, with 72,000 persons reported ill with influenza, the total number from all causes was 197,000. The year 1926 ranks second with 151,000 from all causes and 1929 stands third with 138,000. Last year, however is first among the years having no epidemic of major numerical significance.

Seven diseases—chickenpox, lethargic encephalitis, whooping cough, chancroid, syphilis, diarrhea and enteritis, and occupational diseases—established new high levels. On the other hand, both diphtheria and typhoid fever were brought to the lowest figures ever recorded.

Comparison of the 1929 and 1928 figures is made in the following tables of figures:

	Year 1928	Year 1929
Total	129582	138430
Chickenpox	14447	15423
Diphtheria	4843	3130
Influenza	18229	12017
Lethargic Encephalitis	54	94
Malaria	32	47
Measles	27427	38097
German Measles	420	252
Meningitis, epidemic	240	387
Mumps	9037	3106
Paratyphoid Fever	25	24
Pneumonia	5825	7056
Poliomyelitis	291	180
Scarlet Fever	10174	10571
Smallpox	1236	3223
Tuberculosis	8600	8057
Typhoid Fever	931	896
Whooping Cough	9236	15884
Chancroid	472	598
Gonorrhea	3867	4067
Syphilis	10025	10706
Erysipelas	581	610
Diarrhea & Enteritis (under 2 yrs.)	336	431
Ophthalmia Neonatorum	1084	1066
Trachoma	79	70
Septic Sore Throat	782	718
Occupational Diseases	1164	1399
Other Diseases	134	321

—A conference of health commissioners and sanitarians of Southeastern Ohio was held recently at Marietta.

—Cleveland City Council has adopted a resolution calling on the city administration to provide equal opportunities for nurse training at the Cleveland City Hospital without regard to race or color.

—On the advice of the U. S. Public Health Service, President Hoover has placed an embargo against importation of parrots, due to the outbreak of psittacosis, or parrot fever, in this country.

—The Bucyrus Board of Health has reappointed Dr. W. G. Carlisle as city health commissioner for 1930.

—Proceedings under the Federal Pure Food and Drug Act were filed in the U. S. District Court at Cincinnati by the government for the seizure, condemnation and destruction of 144 bottles of "Nozol", an alleged remedy for catarrh, hay fever, asthma, etc. It is alleged by the government that the product is misbranded in violation of the federal act, in that it does not contain ingredients having the curative or therapeutic properties it is represented to have.

—Dr. J. D. Westrick has been appointed health commissioner of Defiance for a two-year-term.

—A committee from the Marion Academy of Medicine will study the advisability of combining the health districts of the City of Marion and Marion County and report its recommendations to the Academy for action.

——Lamps emitting ultra-violet rays are of great value when used under certain conditions, but different types may be useful for some purposes and not for others, and should not be used without medical knowledge or consultation, according to a statement issued recently by the U. S. Public Health Service.

—Sickness and nonindustrial injuries for eight consecutive calendar days, or longer, occurred at the rate of 103.5 cases annually per 1000 men during the period 1921 to 1928 inclusive, according to a report of a study made by the U. S. Public Health Service. The figures are based on reports from a group of about 35 sick-benefit associations and company relief departments. Respiratory diseases were reported as the cause of 42.4 per cent of the cases; digestive diseases, 13.5, and external causes (nonindustrial accidents) for 9.8 per cent. Five of the nine years covered were marked by influenza epidemics, that disease alone be responsible for 57.5 per cent of the respiratory cases.

—The Northwestern Ohio Society of Sanitarians was organized at Lima by election of the following officers: President, Dr. Guy T. Wasson, Bucyrus; vice president, Miss Elizabeth M. Weigand, Sidney; secretary, Dr. J. J. Sutter, Lima, and Miss Martha Laffey, Bowling Green, and Dr. H. J. Powell, Bowling Green, additional members of the executive committee.

—U. S. Surgeon General H. S. Cumming in a recent report to Congress states that the control of venereal diseases may still be regarded as one of the most important public health problems of this country. He reports that there still are constantly under treatment or observation by physicians and in clinics in the United States approximately 474,000 cases of gonorrhea and 643 cases of syphilis. He also estimated that 697,000 cases of gonorrhea and 423,000 cases of syphilis seek treatment for new infections in the course of a year.

News Notes From County Societies and Academies

First District

ACADEMY OF MEDICINE OF CINCINNATI
(Edward King, M.D., Secretary)

January 20—Regular meeting of the Academy at the Chamber of Commerce. Program: "The Physiology, Pharmacology and Pathology of the Carotid Sinus", by Dr. Edward Baehr.

January 27—Program: "The Goiter Problem", by Dr. Roscoe R. Graham, of Toronto, Canada.

February 10—Program: "Operative Methods for the Purpose of Fusing the Lumbosacral and Sacro-iliac Joints", illustrated with motion pictures, by Dr. Willis C. Campbell, of Memphis, Tenn.—Bulletins.

Butler County Medical Society met at the Middletown hospital, Middletown, on Wednesday afternoon, January 15, with 32 members present. An interesting exhibit of text books and instruments used by physicians more than one hundred years ago was furnished by Dr. J. G. Grafft, Middletown, who spoke in an interesting manner of the days when his grandfather was one of the first physicians to practice in Butler county. Dr. F. W. Coakley, of Hamilton read an interesting paper on "The Sick Infant". Following the scientific session, members adjourned to the nurses' home, where dinner was served.—News Clipping.

Fayette County Medical Society held its regular meeting at the Y. M. C. A. on Thursday, February 6, with a lively discussion on the collection of bad debts, especially ones following automobile accidents. Dr. John Dudley Dunham, Columbus, was the speaker of the day, and gave a very instructive paper on "Abnormalities of the Esophagus", illustrated by lantern slides. He also talked to the Dutch Treat Club at luncheon, preceding the medical meeting.—James F. Wilson, Secretary.

Second District

Clark County Medical Society held its annual banquet at the Springfield Country Club, Springfield, on Friday evening, January 17, and was attended by 143 guests, including physicians from Columbus, Dayton, Xenia, Urbana and other nearby cities. Dr. John B. Deaver, Philadelphia, delivered the principal address of the evening, on the subject of "Hepatitis, The Result of Biliary Tract Infection". Other speakers were Dr. F. C. Gray, of Dayton, Dr. Andre Crotti, of Columbus, and Dr. Ben R. McClellan of Xenia.—News Clipping.

Darke County Medical Society met Thursday afternoon, January 9 at the Health Unit, Greenville. Dr. J. F. Beachler, Piqua, spoke on the subject of "Diagnosis and Treatment of Gall Bladder and Kidney Diseases".—News Clipping.

Miami County Medical Society held its February meeting at the Stouder Memorial Hospital, Troy, on Friday afternoon, February 7. "Medical Practice and Public Health" was the subject of an address by Dr. E. R. Hiatt, county health commissioner.—Program.

Montgomery County Medical Society held its regular meeting on Friday evening, February 7 in the Fidelity Building, Dayton. The speaker of the evening was Dr. Frank A. Kelly, of Detroit, past president of the Wayne County (Michigan) Medical Society, who discussed "Spinal Anesthesia". An operative clinic with demonstrations was held Friday morning at Miami Valley Hospital.—Program.

Third District

Allen County—The Academy of Medicine of Lima and Allen County met Tuesday evening, January 21 for its regular meeting. Following a business session, Dr. J. L. Ransohoff, of Cincinnati, spoke on "Abdominal Surgery".—News Clipping.

Hancock County Medical Society met Wednesday evening, February 5 at the Elk's Home, Findlay. A six o'clock dinner was followed by a short business session. Dr. Klotz read a letter sent from the Society to the Findlay Chamber of Commerce, expressing regret that Mr. William F. Carver, secretary during a term of three and a half years, had resigned. The letter, in part, follows: "Recognizing the fact that Mr. Carver has been unusually active in doing things for the medical profession here, among which was the organization of the Medical Division of the Credit Bureau of the Chamber of Commerce, as well as favoring our profession in various ways, and understanding that he contemplates devoting his entire future time to the business problems of physicians in Chicago, we feel it is a privilege to express to those with whom Mr. Carver may come in contact our confidence in his ability and integrity to serve them as well as he has served us."

Dr. J. F. Holtzmuller and Dr. W. N. Mundy of Forest, were elected as associate members of the society.

After the business meeting, Dr. Tombaugh introduced Dr. Earl W. Huffer, of Toledo, who spoke on "Obstruction at the Bladder Neck". His paper was very interesting and was discussed by many of the members present. Many interesting *X*-ray films were shown on the subject.—J. H. Marshall, Secretary.

Mercer County Medical Society met at the Liberty lunch room, Celina, on Thursday evening, December 20, with nearly all of the members present to enjoy a steak banquet. The visiting speaker was Dr. H. H. Wagner, of Dayton.—News Clipping.

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Fourth District

TOLEDO ACADEMY OF MEDICINE

(A. P. Hancuff, M.D., Secretary)

February 7—General Meeting. Program: "Surgery of Arthritis", by Dr. Philip Duncan Wilson, Boston, Orthopedic Surgeon at Massachusetts General Hospital and Robert Brigham Hospital, and Faculty Instructor of Orthopedic Surgery at Harvard Medical School. Buffet supper at the University Club.

February 14—Section of Pathology, Experimental Medicine and Bacteriology. Program: "Snake Bite, and New Methods of Treatment, with Case Report", by Dr. W. Gordon Hartnett; "The Chemistry of Snake Venom", by Mr. Roger Conant; "Pulmonary Blastomycosis, with Case Report", by Dr. S. S. Hindman, Toledo; "Hydatidiform Mole, with Case Report", by Dr. H. D. Brown.

February 21 — Medical Section. Program: "Diagnosis of Undulant Fever", by Dr. Paul F. Orr, Perrysburg; Case Reports: "Pelvic Thrombo-phlebitis following Placenta Previa", by Dr. Byron G. Shaffer; "Renal Glycosuria—twelve-year duration", by Dr. T. W. Durbin; "Pulmonary Tuberculosis (Basal Type)", by Dr. Howard Holmes.

February 28—Surgical Section. Program: "Comparison of the Goitres of Switzerland and the Great Lakes Region", with motion picture demonstration, by Dr. N. W. Gillette; "Epiphyseal Changes", with lantern slide demonstration, by Dr. Clarence Hufford; "Hypernephroma—A Case Report", by Dr. H. P. Worstell.—Bulletin.

Four County Medical Society, including members from Henry, Fulton, Defiance and Williams counties, met on Thursday afternoon, January 16, at the First Presbyterian Church, Napoleon. "The Significance of Hematuria" was the subject of an address by Dr. G. K. Ormond, of Henry Ford Hospital, Detroit.—News Clipping.

Ottawa County Medical Society held its annual dinner at the Kuebeler dining parlor, Oak Harbor, on Wednesday evening, January 15. Guests included the wives and daughters of members, and physicians from Toledo, Cleveland, Bellevue and Xenia.—News Clipping.

Sandusky County Medical Society met for its regular monthly meeting on Thursday evening, January 30 at the city hall, Fremont. Dr. E. M. Ickes, of Fremont, spoke on "Spinal Anesthesia", and Dr. W. A. Neill of Toledo, discussed "Surgery of the Chest".—News Clipping.

Fifth District

ACADEMY OF MEDICINE OF CLEVELAND

(Claude D. Waltz, M.D., Secretary)

February 5—Obstetrical and Gynecological Section. Program: "Hysterectomy—The Comparative Study of One Thousand Cases", by Dr. W. D. Fullerton, and Dr. Robert L. Faulkner; "Eclampsia—A Clinical Study of Eighteen Cases", by Dr. L. L. Hoskins; "Pulmonary Embolism Complicating Labor and the Puerperium", by Dr. Frank Milward.

February 7—Clinical and Pathological Section. Program: Pediatrics: "Coeliac Disease", by Dr. J. W. Epstein; Medical Cases: "Hepatic Pathology in Cincophen Poisoning", by Dr. S. S. Berger; "Carcinoma of the Lung", by Dr. M. Weitz; "Pneumonia, Appendicitis, Peritonitis and Diabetes", by Dr. J. J. Selman. Surgical Cases: "Demonstration of Mercurochrome Injection Treatment of Endocervicitis", by Dr. J. S. Wolfstein; "Lugol's Solution and Foci of Infection in Hyperthyroidism", by Dr. M. E. Blahd. Cinema Demonstration of Routine Forceps Delivery, by Dr. S. B. Abrams. Neurological Cases: "Traumatic Neurological Conditions. (a) Brachial Plexus Palsy; (b) Syringomyelia", by Dr. S. Baumoel.

February 19—Industrial Medicine and Orthopedic Section. Program: "Traumatic Neurosis", by Dr. A. D. Finlayson.

February 21—Regular Academy Meeting. Program: "Personal Experiences in Bronchoscopy and Esophagoscopy", by Dr. W. B. Chamberlin; "Oral Administration of Barbituric Acid Derivatives before Thyroidectomy", by Dr. H. G. Sloan; "Some Problems in the Treatment of Fractures", by Dr. Farrell T. Gallagher.—Bulletin.

Erie County Medical Society, in conjunction with the Sixteenth District Nurses Association, held a joint meeting at Hotel Rieger, Sandusky, on Tuesday, January 22, with about 60 present. Following the dinner, Dr. W. A. Neill, of Toledo, presented a paper on "Thoracoplasty", which was followed by discussion by Drs. H. J. Austin, Columbus, and R. E. Goewey, of Berea. Dr. Neill's lecture was illustrated by lantern slides. At a business session of the society held January 8, the following officers were elected: President, Dr. G. T. Haynes; vice president, Dr. H. W. Lehrer; secretary-treasurer, Dr. G. A. Stimson (re-elected); delegate to state meeting, Dr. F. M. Houghtaling, and alternate, Dr. Lehrer.—G. A. Stimson, Secretary.

Lake County Medical Society at its last meeting, decided to change its meeting date to 4:30 P. M. on the fourth Tuesday of each month, at Lake County Memorial Hospital, Painesville. The Society, in cooperation with the County Public Health League, are to sponsor a tuberculosis clinic, and Dr. J. C. Placek, of Cleveland, has been recommended to conduct regular tuberculosis clinics at the hospital.—News Clipping.

Lorain County Medical Society held its regular meeting at the Elyria Memorial Hospital, Elyria, on Tuesday evening, February 11, commencing with a five o'clock dinner. Dr. Charles H. Hay, of Cleveland, addressed the society on "Some of

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the Causes and Treatment of Headaches".—Program.

Sixth District

Portage County Medical Society met at the office of Dr. S. A. Brown in Kent, on Thursday, February 6. Dr. Walter A. Hoyt, orthopedist of Children's Hospital, Akron, gave an instructive talk on "Diseases of the Hip", showing many lantern slides. Dr. J. H. Selby, pathologist of the People's Hospital, Akron, took part in the discussion.—E. J. Widdecombe, Secretary.

Stark County Medical Society held its regular meeting on Tuesday evening, January 14, in the Medical Library Room, Canton. The program consisted of the following papers: "Dyspepsia Due to Gall Bladder Disease", by Dr. H. W. Beck; "The Gall Bladder from a Roentgenologic Standpoint", by Dr. C. M. Peters. The program for the February meeting of the Stark County Medical Society, which was held Tuesday evening, February 11, included the following papers: "Acute Coronary Occlusion", by Dr. D. D. Shontz; discussion by Dr. C. A. LaMont; "*X*-ray Therapy", by Dr. E. O. Peterson.—Program.

Summit County Medical Society met Tuesday evening, February 4, at the Akron City Club, for its regular meeting. "Various Aspects Concerning the Nasal Accessory Sinuses" was the subject of an address by Dr. William Mithoefer, of Cincinnati.—Program.

Seventh District

Belmont County Medical Society had an attendance of more than thirty members at the monthly meeting held on Wednesday afternoon, January 29, at Kilkenny Inn, Martins Ferry. Guests speakers included Dr. Howard T. Phillips, Wheeling, who spoke on "Differential Diagnosis of Syphilis from Other Cutaneous Diseases", and Dr. Harry Hall, Wheeling, president of the West Virginia State Medical Association, spoke on "Industrial Medicine". The meeting was concluded with a chicken dinner, —News Clipping.

Columbiana County Medical Society held its regular meeting on Tuesday evening, February 11, at the Traveler's Hotel, East Liverpool. Following a six o'clock dinner, Dr. Claude B. Norris, of Youngstown, addressed the society on the subject of "Some Practical Considerations of Skin Diseases from the Standpoint of the General Practitioner".—Bulletin.

Coshocton County Medical Society met at the nurses home, Coshocton, on Thursday evening, January 30. Speakers for this meeting were Dr. J. D. Lower, who talked on "Pneumonia", and Dr. S. D. Cohen, who spoke on "Treatment of Pneumonia". Discussion of the papers was opened by Drs. W. A. McMichael and J. E. Hahn. —News Clipping.

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Eighth District

Perry County Medical Society held its regular meeting on Monday, January 20 at the Park Hotel, New Lexington. Dr. R. D. Bateman, Zanesville, presented a paper on "Obstruction of the Ureter".—News Clipping.

Washington County Medical Society held its regular meeting on Wednesday, January 15 at the Court House, Marietta. An interesting paper on "Laboratory Findings and their Clinical Relationship" was presented by Mr. Lang. It was voted to hold all future meetings at the new Marietta Memorial Hospital, by invitation of Mr. Dodge, the superintendent.—J. R. Warren, Secretary.

Muskingum County Academy of Medicine held its regular meeting in the American Legion Rooms, Zanesville, on Wednesday evening, February 5. A paper on "Endocrinology" was presented by Dr. W. D. Coffman, and several case reports were presented by other members. Following a discussion of the increase in Fellowship

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dues of the A.M.A., unanimous action was taken by the Academy, protesting the increase at the present time. The resolution stated that: "It was the consensus of opinion that the increase of dues at the present time was ill advised because of the unusual business depression. Physicians find it impossible to collect fees; hospitals are ready to close their doors, and it was deemed advisable that *The Journal*, rather than increase its activities by publishing matter upon which there is a financial loss, should curtail its activities, thus acting in the interest of the general profession."—Beatrice T. Hagen, Secretary.

Ninth District

Scioto County—Hempstead Academy of Medicine held its regular meeting on Monday evening, February 10 at Recreational Hall, Nurses Home, Portsmouth. Dr. Edward Harlan Wilson, Columbus, addressed the society on "Chronic Arthritis", which was followed by a general discussion. At the close of the program, a buffet lunch was served.—Bulletin.

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

*January 20—D*inner meeting, at the Young Women's Christian Association. Program: "Some Phases of Gall Bladder Disease", by Dr. George W. Crile, of Cleveland.

January 27—Regular meeting at Public Library. Program: "The Cost of Medical Care. A Point of View", by Dr. Leslie Lawson Bigelow. Discussion opened by Drs. J. F. Baldwin, H. M. Platter, and C. M. Shepard.

February 3—Regular meeting at St. Francis Hospital: Non-operative surgical clinics, by Drs. L. L. Bigelow, I. B. Harris, G. H. Shawaker and L. V. Zartman.

February 10—Dinner meeting, University Club, Seneca Hotel. Program: "Impending Developments in the Diagnosis and Treatment of Cancer", by Dr. Francis Carter Wood, director of the Institute of Cancer Research, New York City.—Bulletin.

Ross County Medical Society met at the Warner Hotel, Chillicothe, on Thursday evening, January 9. The meeting was addressed by Dr. L. L. Bigelow, Columbus, who spoke on "The History of Medicine". This subject is always an interesting one, and especially so when given by one so well versed in this subject. Following his talk, a representative of the Petrolagar Company, presented two reels of motion pictures, which peristalsis of the stomach of a dog after Vagus Nerve stimulation, and the second reel, a beautiful demonstration of dissection of the abdominal wall—an excellent review of anatomy. Both reels were intensely interesting. These pictures were made at the University of Chicago by Professor A. J. Carlson and Professor Arno B. Luckhardt. —Walter C. Breth, Secretary.

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District No. 9—1930 Robinwood Ave., Apartment 40, "The Scotwood," Toledo, Ohio. Phone: Main 7962
District No. 12—398 N. Garfield Ave., Columbus, Ohio. Phone: Franklin 1234
District No. 15—Portsmouth General Hospital, Portsmouth, Ohio. Phone: 559

HOSPITAL NOTES

—Fifty milligrams of radium, said to be worth $4,000, was retrieved with an electroscope from the furnace of Aultman Hospital, Canton. It had been accidentally burned with some surgical dressings.

—One of the greatest problems facing State Hospitals is the care of aged persons who could be better cared for at home but who are sent to the hospitals by relatives who do not want the responsibility of caring for them, Dr. John H. Berry, superintendent of the Athens State Hospital told members of the Athens Rotary Club during a recent luncheon talk.

—John G. Benson was re-appointed superintendent and Dr. Andre Crotti, chief of staff, at a recent meeting of the Board of Directors of White Cross Hospital, Columbus.

—A nurses' training school has been opened at the Fort Hamilton Hospital, Hamilton. The initial registration was 12.

—Announcement has been received of the opening of Dellhurst Sanitarium for mental and nervous diseases in Mentor, Ohio, with Dr. B. L. Hume as medical director. Dr. Hume, formerly from Huntington, West Virginia, was assistant superintendent of the Huntington State Hospital.

—Recent appointments to the faculty of the New York Polyclinic Medical School and Hospital include Dr. Shirley W. Wynne, (Health Commissioner, New York City) Professor of Preventive Medicine; Dr. Gaylord W. Graves, Professor of Pediatrics; and Dr. Alexander T. Martin, Professor of Pediatrics.

—The following officers were elected at a recent meeting of the staff of the Lake County Memorial Hospital, Painesville: President, Dr. J. V. Winans, Madison; vice president, Dr. N. C. Ice, Willoughby; secretary, Dr. F. J. Dineen, Painesville; executive committee, Drs. G. F. Barnett, G. O. Williams and M. H. Carmody; program committee, Drs. B. S. Park, V. N. Marsh and R. H. Spence. Dr. Eugene Freedman, Cleveland, has been appointed roentgenologist, and will spend each Saturday afternoon at the hospital.

—The following staff for the Robinwood Hospital, Toledo, was approved at the annual meeting of the hospital association:

Dr. Howard L. Green, chief of staff; Dr. E. Benjamin Gillette, secretary, and Drs. Norris W. Gillette, Dale Wilson, Edward P. Gillette, A. H. Schade, A. J. Hartman, F. A. Leslie, Charles R. King, E. W. Campbell, J. W. Young, Claude B. Cole, W. J. Kirkbride, F. A. Cobb, J. S. Teter, E. B. Barlow, Donald Mebane, Lamora Shuey, John Gardiner, W. W. Penske, Henry D. Brown, Reed Brigham, Josephine Orr, R. S. Gillette and Thomas Hubbard, emeritus.

Associate staff members include Drs. A. A. Brindley, John F. Beerman, Frank Newton, Wilbur A. Taylor, Theo. C. Kiess, E. R. Marker, F. E. Coultrap, J. F. Vick, C. C. Dreyer and V. O. Moore.

—Appointments to the staff of the Huron Road Hospital, Cleveland, for the year have been announced by the Board of Trustees as follows:

General medicine: Dr. A. C. Buell, consultant; Drs. J. E. Rowland, Mabel S. Gilbert, A. B. Schneider, H. F. Staples, G. A. Jend, C. L. Moore, Floyd Meck and G. A. Rowland.

Pediatrics: Dr. Gertrude K. Meck, consultant; Drs. W. E. Allyn, Mary White, May Schimokola, E. J. Mahoney and Stanley Meck.

Neurology: Dr. J. Richey Horner.

General surgery: Drs. H. L. Frost, Benjamin B. Kimmel, A. E. Biddinger, H. C. Prill, D. J. Bryant and L. L. Chandler.

Physiotherapy: Dr. R. A. Case and Dr. Robert Houser, Gynecology; Drs. James C. Wood, George J. Salisbury, Frieda Weiss Robertson and W. W. Starrett.

Ophthalmology: Dr. A. E. Obershoff, consultant; Drs. H. S. Thompson, William L. Fox and Joseph B. Hall. Proctology: Dr. D. H. Patterson.

Urology: Dr. J. A. Lytle, consultant; Drs. W. J. Klein and A. H. Reed.

Obstetrics: Dr. Scott C. Runnels and Dr. T. J. Kaminski. Otology, rhinology and laryngology: Dr. Carl Rust and Dr. George H. Quay. Pathology: Dr. R. G. Schnee.

Legal medicine and ethical relations: Dr. L. E. Siemon. Determatology: Dr. C. G. La Rocco.

—Dr. Albert H. Freiberg was re-elected dean of the staff at the Jewish Hospital, Cincinnati, following the appointment of members of the staff by the trustees. Those on the staff are:

Directors of Services: Drs. Henry W. Bettmann, S. Brown, Albert Faller, Albert H. Freiberg, Victor Greenebaum, M. Gruenebaum, M. Herzberg, Samuel Iglauer, C. King, L. Krouse, Louis Lurie, Louis Ransohoff, W. Rothenberg, M. Salzer, J. Stark, E. O. Swartz, Elmore B. Tauber and David I. Wolfstein.

Attending Physicians: Drs. Ira Abrahamson, J. P. Becker, Julien E. Benjamin, C. Betzner, A. Brown, H. Brown, M. Dreyfoos, E. I. Fogel, Henry Freiberg, L. Heyn, C. Hiller, C. Howard, W. C. Harris, F. A. S. Kautz, E. King, S. Okrent, J. Lavender, D. Lyle, Gilbert Mombach, E. A. North, S. Rabkin, William Ravine, Howard Schriver, S.

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Consultants: Dr. A. Friedlander and Dr. Philip Zenner.

—Dr. F. D. Phinney wasc named chief of the staff of the Bethesda Hospital, Cincinnati, at an organization meeting. Dr. C. S. Amidon was elected vice president, and Dr. C. E. Eha, secretary-treasurer.

—At a recent meeting of the trustees of the Cincinnati Children's Hospital, the following list of staff physicians was announced:

Dr. A. Graeme Mitchell, Chief of the Medical Staff.

Dr. Frank A. Lamb, Assistant Chief of Staff, and Director of Pediatric Service.

Attending Pediatricians—George E. Dash, Harold F. Downing, Frank E. Stevenson, George M. Guest.

Assistant Attending Pediatricians—George F. Patterson, Benjamin A. Hoyer, Merlin L. Cooper, Robert A. Lyon, Waldo E. Nelson.

Associate Pediatricians—Albert J. Bell, J. Victor Greenebaum, Edward A. Wagner.

Surgical Service—Dr. Walter R. Griess, Director of Surgical Service; Dr. Mont R. Reid, Assistant Director of Surgical Service; Dr. George J. Heuer, Consulting Surgeon; Dr. Charles A. Langdale, Attending Surgeon; Assistant Attending Surgeons, Reed A. Shank, Ralph G. Carothers, Paul W. Sutton, William DeWitt Andrus; Associate Surgeon, John Caldwell.

Oto-Laryngological Service—Dr. Walter E. Murphy, Director of Service; Charles C. Jones, Assistant Director; Attending Oto-Laryngologists, Merrick F. McCarthy, Edward King, Henry M. Goodyear, H. H. Vail; Assistant Attending Oto-Laryngologists, Samuel Seltz, Arthur G. Beyer, Willam J. Topmoeller, H. L. Stitt.

Orthopedic Service—Dr. Albert H. Freiberg, Director of Service; Robert B. Cofield, Assistant Director; Robert Carothers, Consulting Orthopedic Surgeon; John G. McCammon, Assistant Orthopedic Surgeon; Joseph A. Freiberg, Assistant Orthopedic Surgeon.

Dermatological Service—Dr. Elmore B. Tauber, Director of Service; Dr. Harry L. Claussen, Attending Dermatologist.

Neurological Service—Dr. A. W. Foertmeyer, Acting Director of Service; Dr. Emerson North, Attending Psychiatrist.

Urological Service—E. O. Smith, Director of Service; Gordon F. McKim, Assistant Director; E. O. Schwartz, Attending Urologist.

Ophthalmological Service—Clarence King, Director of Service; Wylie McLean Ayers. Consulting Ophthalmologist; Attending Ophthalmologists, William S. Keller, Donald J. Lyle, Derrick T. Vail, Jr.; Assistant Attending Ophthalmologists, Victor Ray, Jr., Albert L. Brown.

Dental Service—Robert M. Schell, Dental Surgeon; Henry T. Smith, Consulting Dental Surgeon; Assistant Dental Surgeons, C. G. Erbeck, Henry Thomason.

X-ray Service—William M. Doughty, Director of Service; E. R. Bader, Attending Radiologist.

Pathological Service—Richard S. Austin, Director of Service; Irving H. Schroth, Attending Pathologist.

Bacteriological Service—William B. Wherry, Director of Service.

Dr. Stanley E. Dorst, Director of Clinical Laboratories.

Organization of the staff of the Deaconess Hospital, Cincinnati, has been announced by Rev. A. G. Lohmann, superintendent, as follows:

Consultants—Gynecology—Dr. J. W. Rowe and Dr. John D. Miller. Pathology—Dr. Richard S. Austin and Dr. Nathan Foote. Seniors—Gynecology—Dr. O. J. Seibert, director; Dr. C. T. Souther, Dr. C. E. Hauser. General Surgery—Dr. Walter R. Griess, director; Dr. Harry M. Box, Dr. Dudley W. Palmer and Dr. Louis Feid, Jr. Genito-Urinary—Dr. Henry Freiberg, director; Dr. A. W. Nelson. Internal Medicine—Dr. J. L. Tuechter, director, Dr. Theodore Bange, Dr. F. C. Theiss and Dr. W. W. Klement. Pediatrics—Dr. E. O. Straehley, Sr., director, and Dr. Frank H. Lamb. Obstetrics—Dr. D. J. Davies, director, and Dr. E. W. Enz. Nervous and Mental Diseases—Dr. C. E. Shinkle. Ophthalmology—Dr. R. C. Heflebower, director, and Dr. K. L. Stoll. Otology and Laryngology—Dr. W. C. Harris, director; Dr. W. E. Murphy, Dr. A. J. Light and Dr. William Topmoeller.

Radiography and Radio Therapy—Dr. E. R. Bader and Dr. Charles Goosmann. Dental Surgery—Dr. C. H. Burmeister. Orthopedics—Dr. E. A. Klein. Proctology—Dr. E. M. Oxley. Dermatology—Dr. Karl Zwick. Pathology—Dr. K. V. Kitzmiller. Anesthetist—Dr. M. Wallenstein.

Juniors——Gynecology—Dr. Charles Heisel. General Sur-

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THE fact that Mellin's Food modifications have a practically unlimited range of adjustment is also worthy of attention when constipation is caused by fat intolerance, or an excess of all food elements, or a daily intake of food far below normal requirements, for all such errors of diet are easily corrected by following the system of infant feeding that employs Mellin's Food as the milk modifier.

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Officers of the staff are: Dr. Theodore Bange, president; Dr. Harry M. Box, vice president, and Dr. W. W. Klement, secretary-treasurer.

—Organization of the staff of the Findlay Home and Hospital for 1930 has been announced as follows:

Chief of staff, Dr. J. C. Tritch; vice-chief, Dr. O. P. Klotz. Surgical—Dr. J. V. Hartman, Dr. J. M. Firmin, Dr. O. P. Klotz, Dr. J. H. Marshall. Dr. E. B. Herrington. Obstetrics—Dr. E. E. Rakestraw, Dr. D. B. Biggs, Dr. D. J. King. Gynecology—Dr. J. C. Tritch. Eye, ear, nose and throat—Dr. W. J. Fishell, Dr. H. R. Wynn, Dr. H. O. Crosby. Neurology—Dr. W. B. Keaton. Roentgonology—Dr. E. J. Thomas. Urologist—Dr. T. A. Spitler. Dentist—Dr. A. E. Mann.

Medical—Dr. E. J. Thomas; Dr. F. M. Wiseley, Dr. P. C. Pennington, Dr. T. S. Wilson, Dr. D. C. Hughes. Pediatrics—Dr. E. W. Misamore, Dr. J. H. Marshall, Dr. F. M. Wiseley. Anesthesia—Dr. E. E. Rakestraw, Dr. D. C. Hughes, Dr. R. D. Whisler. Bacteriology and Technician—Miss Gertrude Anderson, A. B., M. S. Electro Cardiologist—Dr. F. M. Wiseley. Radium Therapy—Dr. J. C. Tritch.

—Dr. E. C. Banker will serve as chief of staff at St. Thomas Hospital, Akron, during 1930. Other appointments to the staff are:

Surgical—Drs. E. C. Banker, Carl Steinke, John Weber, and Harvey Musser.

Orthopedics: Dr. W. A. Parks, R. V. Luce, Walter Hoyt, and Harold Conn.

Medical—Drs. Dan Brennan, John Monnig, S. Morgenroth and A. J. Devaney.

Consulting specialists: A. S. Robinson, consultant; Dr. F. A. Smith, diabetic specialist, and Dr. C. L. Baskin, skin specialist.

Obstetrics—Drs. Joseph McEvitt, Roy Werner, J. C. Lemmon and Robert Etienne.

Pediatrics—Drs. J. G. Kramer and Joseph Ulrich.

Eye, Ear, Nose and Throat—Drs. Louis Witzman, Marshall Pierson, John Shoemaker and R. F. Thaw.

X-ray—Dr. Paul Langan.

Pathologist—Dr. F. E. Potter.

—Contracts have been let for a $700.000 Lucas County Hospital and work is to be started immediately.

—The Delaware Kiwanis Club has donated $1000 to the Jane Case Hospital as a memorial to the late J. Fred Gleich, former president of the club.

—Marion County Commissioners have received a proposal from the City of Marion whereby the county may become a partner in operation, management and privileges of the Marion City Hospital by contributing $250,000 toward improvements at the hospital, a sum equal to the amount which the city has invested in the hospital.

—The Clark County Medical Society won another victory in its fight to prevent the Springfield Hospital Association from erecting the proposed new City Hospital on a site unsatisfactory to the medical society when the society's demurrer in the legal battle was upheld by Common Pleas Judge William White of Dayton. Judge White held that the City Commission, not the hospital association, was the one specified by law to select the site. The medical society has urged the city to follow its advice as to the most desirable location for the institution.

—The medical staff for 1930 at the Berea Community Hospital is composed of Dr. Louis G. Knowlton, chief; Dr. John A. Shoemaker, secretary, and Drs. W. P. Bowser, Glenn Hankinson, D. V. Kechele, O. J. Kechele and A. H. Perry.

—Ground for the new $2,000,000 Good Samaritan Hospital, Dayton, will be broken March 1, John Q. Sherman, president of the hospital association has announced. It will have a capacity of 200 beds.

—Five Columbus physicians who served on the consulting staff of the Student Health Service, Ohio State University, during the winter quarter, were: Drs. W. P. Smith, Carl D. Hoy, W. F. Milhon, Arthur M. Hauer and Wayne Brehm.

—The Lancaster City Council is considering plans for erection of a Fromlet Memorial wing to the Lancaster City Hospital with approximately $40,000 bequeathed to the city for that purpose by the late Mrs. Julius Beck Fromlet.

—House physicians and interns of Good Samaritan Hospital, Cincinnati, were guests at a dinner given by Dr. E. O. Smith, chairman of the staff committee on interns, in honor of Dr. Clyde S. Roof, house physician, who resigned to take post-graduate work at Vienna.

—Dr. Daniel C. Rivers was appointed resident physician at Good Samaritan Hospital, Cincinnati, at a recent meeting of the officers of the hospital. Dr. Samuel E. Flook was named resi-

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dent in surgery. The following will become interns at the hospital July 1: Omer J. Jasper, Willard C. Clark, Edgar J. Wilke, Carroll J. Fairo, Harry C. Ernsting, William F. Sohngen and Starr M. Ford, all of the University of Cincinnati; James E. Vollmer, Northwestern University; Joseph L. Pater, Ronald J. McNamara, James G. Parker and Walter M. O'Nan, all of St. Louis University.

—A new 150-bed hospital cottage at the U. S. Veterans' Hospital No. 97, Chillicothe, has been completed, increasing the capacity of the hospital to 625 beds.

—City Welfare Director D. S. Blossom, Cleveland, is making a survey of downtown Cleveland to pick a site for a new downtown hospital and recommend immediate action by City Council in providing funds for its erection. Removal of Lakeside Hospital to University Circle in the near future will leave downtown Cleveland with only one hospital for emergency cases.

—Construction work on a new $150,000 addition to the East Liverpool City Hospital will be started in the near future. The money was provided at the last general election by passage of a special tax levy.

—Immediate start on the erection of a nurses' home and superintendent's residence at the Clark County Sanatorium with funds voted at the election in the fall of 1929 is urged in the annual report of Dr. J. D. Thomas, superintendent.

—Miss Louzilla Beery has succeeded Miss Martha Graber as superintendent of the Bluffton Hospital. Miss Eldora Gratz has succeeded Miss Beery as assistant superintendent.

—Improvements amounting to $10,000 at the Gates Hospital for Cripple Children, Elyria, will be started about March 1.

—The Akron Chamber of Commerce is making a survey of contagious disease hospitals in other cities and will use its findings to arouse sentiment for the erection of such a hospital there.

—City Manager C. A. Harrell, Portsmouth, has ordered the Portsmouth city solicitor to proceed at once with the collection of approximately $10,000 owed the Portsmouth General Hospital by former patients.

—Dr. J. M. Polleson, Mayo Clinic, Rochester, Minn., addressed the staff of the Bethesda Hospital, Zanesville, recently.

—A new department for nervous and mental disease cases has been opened by Good Samaritan Hospital, Cincinnati.

—Officers elected by the Board of Trustees of the Glenville Hospital, Cleveland, are: Presi-

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Type I and Type II

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This new *concentrated* ANTI-PNEUMOCOCCIC SERUM SQUIBB offers the following advantages:

1. Its small volume permits the administration of more than 10 times the quantity of protective antibodies supplied in an equal volume of unconcentrated serum.
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Concentrated ANTI-PNEUMOCOCCIC SERUM, Types I and II, SQUIBB is supplied in syringes, each containing one dose. 10,000 units each of Type I and Type II pneumococcic antibodies, as measured by the Felton method, are contained in each syringe.

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MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

dent, Dr. J. E. Tuckerman; vice president, Dr. C. C. Crawford; secretary, Dr. C. D. Waltz; treasurer, Dr. A. W. Henn.

—The new $1,000,000 Cleveland Marine Hospital will be ready for occupancy in June.

—Charles Findley, superintendent of University Hospital, Columbus, was re-elected president of the Columbus Hospital Association at the annual meeting of the association.

—Martin S. Dodd, law director of Toledo, has notified the Lucas County Commissioners that the county must vacate the Municipal Hospital, which the county had been using under a financial agreement with the city.

—Incorporation papers have been filed for the Barnesville Hospital, Inc., with a capital stock of $100,000 by Dr. E. P. White, Dr. J. T. McCartney, Vernon Burkhart, Fred Hunt, J. T. Ballard, A. E. Kennard and St. Clair Hasbrouck. The stock will be offered to citizens of Barnesville.

—Dr. J. V. Winans, Madison, was elected president of the Lake County Memorial Hospital staff. Other officers are Dr. N. C. Ice, Willoughby, vice-president; Dr. F. J. Dineen, Painesville, secretary, and Drs. G. F. Barnett, G. O. Hedlund and M. H. Carmody, members of the executive committee.

New Regulations Governing Maternity and Tuberculosis Hospitals Now in Effect in Ohio

Important amendments to the Ohio Sanitary Code, affecting the regulations for tuberculosis and maternity hospitals, have been adopted by the Ohio Public Health Council and became effective February 1.

The sections revised by the Council follow, as amended by that board:

Regulation 61. (Notice of Admission of Patient.) Within twenty-four hours after the admission of a patient into a county, district or semi-public tuberculosis hospital the medical superintendent or other person in charge of such hospital shall send to the director of health a preliminary notice of admission on a form to be provided by the director. Within thirty days after the admission of the patient there shall be sent to the director of health a final notice of admission which shall contain such details in regard to the patient as the director may require.

Regulation 62. (Notice of Death or Discharge.) Within twenty-four hours after the death, discharge or voluntary leaving of a patient admitted to a county, district, or semi-public tuberculosis hospital the medical superintendent or other person in charge of such hospital shall send to the director of health a notice of such death, discharge or voluntary leaving on a form prescribed and furnished by such director.

Regulation 70. (Classification of Patients.) Patients shall be classified according to the following arrangement adopted by the American Sanatorium Association and by the National Tuberculosis Association:

CLASSIFICATION OF PATIENTS ON EXAMINATION

Lesion

Minimal: (Incipient.)—Slight lesion limited to a small part of one or both lungs. No serious tuberculosis complications.

Moderately Advanced: A lesion of one or both lungs,



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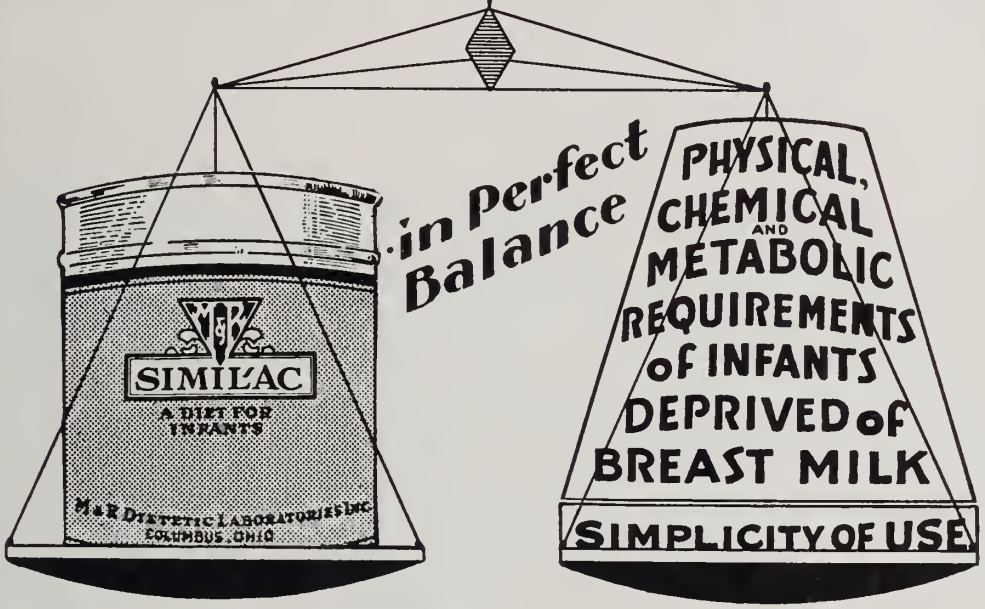
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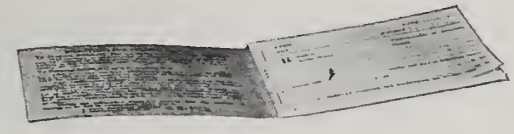
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Yet Similac achieves a most satisfying simplicity. Your directions for its use are easily understood, easily followed by any mother. In complementing breast feedings, for example, it is only necessary to add Similac, in the proportion of one measureful (measure in can) to two ounces of previously boiled water.

M & R Dietetic Laboratories, Inc.

COLUMBUS, OHIO

more widely distributed than under Minimal, the extent of which may vary, according to the severity of one lung to from the equivalent of one-third the volume of one lung to the equivalent of the volume of an entire lung with little or no evidence of cavity formation. No serious tuberculosis complications.

Far Advanced: A lesion more extensive than under *Moderately Advanced.* Or definite evidence of marked cavity formation. Or serious tuberculosis complications.

Symptoms

A—(Slight or None): Slight or no constitutional symptoms including particularly gastric or intestinal disturbance or rapid loss of weight; slight or no elevation of temperature or acceleration of pulse at any time during the 24 hours. Expectoration usually small in amount or absent. Tubercle bacilli may be present or absent.

B—(Moderate): No marked impairment of function, either local or constitutional.

C—(Severe): Marked impairment of function, local or consitutional.

CLASSIFICATION OF SUBSEQUENT OBSERVATIONS

Apparently Cured: All constitutional symptoms and expectoration with bacilli absent for a period of two years under ordinary conditions of life.

Arrested: All constitutional symptoms and expectoration with bacilli absent for a period of six months; the physical signs to be those of a healed lesion; roentgen findings to be compatible with the physical signs.

Apparently Arrested: All constitutional symptoms and expectoration with bacilli absent for a period of three months; the physical signs to be those of a healed lesion; roentgen findings to be compatible with the physical signs.

Quiescent: Absence of all constitutional symptoms; expectoration and bacilli may or may not be present; physical signs and roentgen findings to be those of a stationary or retrogressive lesion; the foregoing conditions to have existed for at least two months.

Improved: Constitutional symptoms lessened or entirely absent; cough and expectoration with bacilli usually present; physical signs and roentgen findings to be those of a stationary or retrogressive lesion.

Unimproved: Essential symptoms unabated or increased; physical signs and roentgen findings to be those of an active or progressive lesion.

Died.

Regulation 80. (After Treatment.) After the birth of a child, a legally qualified physician shall be in attendance upon the mother for at least ten days and shall conduct all after-treatment. *Where the mother is delivered in a hospital outside of the maternity home the mother and baby shall be kept in the hospital where delivery is made for a period of not less than eight (8) days.*

Regulation 83. (Employment of Nurses.) Each maternity hospital shall employ at least one registered nurse, except that where no registered nurse is available in the community, *nursing service shall be provided that will meet the approval of the State Department of Health.*

Deaths Increased but Death Rate Declined in Ohio in 1929

There were approximately 1500 more deaths in Ohio during the year 1929 than in 1928, according to a statistical bulletin issued by I. C. Plummer, chief of the division of vital statistics, State Department of Health, based on incomplete figures for the year 1929.

Present data shows that there were 81,153 deaths in 1929, compared to 80,146 in 1928, an increase of 1007. It is pointed out, however, that belated reports will probably boost the 1929 increase by approximately 500, making the increase for the past year somewhere in the neighborhood of 1500.

Although the total number of deaths during 1929 was slightly greater than the number for 1928, the death rate per 100,000 population in 1929 was only 12.05 compared to 12.08 in 1928. This decline was due to the increase in the population of the state during the 12-months period.

The influenza epidemic of 1928-29, which reached its peak in January, 1929, causing a 7.7 increase in the death rate per 100,000 from that



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These plants are dotted along the coast line from Cape Cod to Newfoundland. So they make oil from fresh livers of fresh codfish, brought in by the "handliners" as the codfish season swings north and south.

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The Chronic

They have worn holes in the carpets of many a waiting room and frayed the physicians' patience to shreds.

Often, underlying the chronic condition is bowel stasis and irrational use of harsh cathartics.

In such cases many chronics have been definitely benefited by a period of "habit time" education together with other rational treatment.

The use of Petrolagar will materially shorten the period of bowel re-education. A few of the advantages of using Petrolagar over plain mineral oil are its palatability, its more thorough permeation of the feces, less danger of leakage, and it has no deleterious effect on digestion.

Petrolagar



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Gentlemen: — Send me copy of the new brochure "HABIT TIME" (of bowel movement) and specimens of Petrolagar.

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disease in that month over January, 1928, was largely responsible for the increase in deaths for the entire year 1929.

The causes of death showing an increase during 1929 were measles, scarlet fever, whooping cough, influenza, meningo-coccus meningitis, diseases of the heart, suicide, and railroad, street car and automobile accidents. Those showing a decrease were diphtheria, tuberculosis, (all forms), cancer (all forms), cerebral hemorrhage, nephritis, malformation, deaths peculiar to early infancy, and homicide.

Comparison of the causes of death with rates per 100,000 population for 1928 and 1929, with figures for 1928 complete and those for 1929 incomplete, follows:

Diseases	1928 Number	1928 Rate	1929 Number	1929 Rate
Typhoid fever	137	2.6	145	2.15
Smallpox	4	.06	3	.04
Measles	190	2.86	238	3.53
Scarlet fever	134	2.02	149	2.21
Whooping cough	249	3.75	527	7.83
Diphtheria	369	5.56	225	3.34
Influenza	3354	50.56	4,009	59.53
Acute poliomyelitis	71	1.07	41	.60
Meningo-coccus meningitis	129	1.94	180	2.67
Rabies	8	.12	3	.04
Tuberculosis (all forms)	4,759	71.76	4,536	67.36
Other epidemic, endemic, infectious diseases	991	14.94	972	14.43
Cancer (all forms)	6,884	103.81	6,768	100.50
Diabetes	1,426	21.50	1,358	20.16
Cerebral hemorrhage	7,616	114.84	7,376	109.53
Heart disease (all forms)	14,465	218.13	14,701	218.31
Broncho pneumonia	2,989	44.06	2,943	43.70
Lobar pneumonia	3,428	51.69	3,052	45.32
Diarrhea and enteritis (under 2 years)	945	14.25	824	12.24
Diarrhea and enteritis (over 2 years)	350	5.27	364	5.41
Nephritis	5,731	86.41	5,466	81.17
The puerperal state	743	11.20	687	10.20
Malformations and deaths peculiar to early infancy	4,463	67.29	4,273	63.45
Suicide	928	13.99	1,008	14.97
Conflagration	91	1.37	64	.95
Accidental burns (conflagration excepted	394	5.71	332	4.93
Accidental falls	1,251	18.86	934	13.87
Railroad accidents	568	8.56	572	8.49
Street car accidents	150	2.26	158	2.35
Automobile accidents	1,730	26.08	1,915	28.44
Other accidents	1,611	24.29	1,517	22.53
Homicides	519	7.82	503	7.49
All other causes	13,469	203.11	15,320	227.50
Grand total	80,146	12.08	81,153	12.05

Some Interesting Medical Problems in Workmen's Compensation as Seen by a Committee in New York State

An interim report, pointing out certain flaws and abuses in the medical service under the Workmen's Compensation Act of New York State and suggesting further studies on some of the basic problems uncovered by the investigation, has been submitted to Frances Perkins, state industrial commissioner, by a committee of three appointed by her to make a survey of the situation as it exists in the Empire State.

Prefacing its recommendations by a description of the various industrial clinics operating in New York City, pointing out that a number of these clinics are improperly housed, lacking in essential equipment, unorderly and insufficiently manned by competent physicians, the investigating committee called special attention to the fact that

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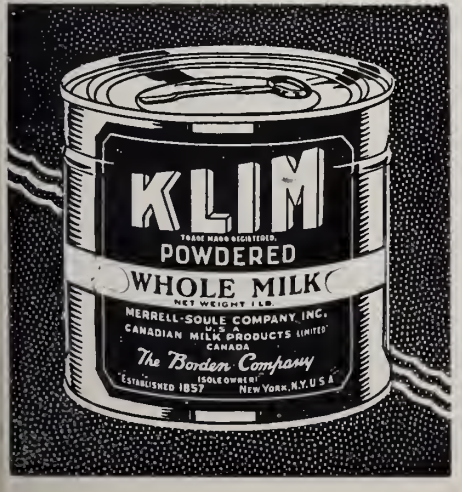
KLIM for the Relief Bottle

THE practice of giving one or two bottle feedings a day to breast fed infants is fast growing in favor. The rest afforded the mother better enables her to nurse the baby during the interim and so relieves the strain that she is encouraged to continue breast feeding. This method also produces a gradual weaning which is helpful upon the cessation of breast milk.

When Klim is used for complemental feeding, there is no danger of engendering digestive disturbances due to sudden changes in curd formation. The friable and finely divided curd of this pure, specially powdered milk, together with the absolute uniformity of the product, assures adequate nutrition and the preservation of normal metabolic balance.

Literature and samples including special feeding calculator sent on request.

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(Recognizing the importance of scientific control, all contact with the laity is predicated on the policy that KLIM and its allied products be used in infant feeding only according to a physician's formula.)

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some clinics are for a large part of the time in the sole charge of those unfit and unauthorized by law to treat injured workmen.

"We found that in some instances," the committee stated, "the clinic is for a large part of the time, and as a matter of routine, in the sole charge of a nurse (not necessarily registered) or 'secretary' without any pretension to nursing training, who has of course no license to practice medicine, but who nevertheless assumes to give treatment in all cases except perhaps in extreme emergencies, thereupon summoning a physician who may or may not be the physician nominally in charge.

"This practice is as vicious as it is illegal, and requires immediate correction. Moreover, the large part played by physio-therapy in the treatment of injuries in later stages affords in some cases the cover for a great deal of medical treatment by the relatively low-paid physiotherapists attached to the clinics, such physiotherapists carrying on their work, in many instances, in bland disregard of the medical practice act, which requires them to be licensed. All these conditions were personally observed by your committee and are indeed a matter of common notoriety among those familiar with the situation; and the abuse is grave enough to have been the subject of a communication to the department from the division of legal medicine of the Department of Health of the City of New York. These conditions call for immediate correction. The high standards of practice found in some of the clinics demonstrate that the abuses recited are not inherent in the system, and warrant the belief that such practices could be eliminated by the proper system of surveillance."

The committee recommended that suitable legislation be procured restricting the treatment of injured employes, upon the authorization of the employer to such physicians, nurses, physiotherapists, etc., as are specially registered therefor by an appropriate official department; that each clinic or station be similarly registered, such registration to include requirement for the attendance of a licensed physician at all times.

"These requirements can be enforced", the committee declares, "by the simple expedient of refusing to honor, in making awards, any bill for medical service rendered upon the authorization of the employer by an unregistered physician or clinic, and by prohibiting the payment of any such bill by any carrier."

The committee reported that it has not attempted as yet to examine "the larger and more fundamental problem of medical service to injured employes—*the problem of securing to the employes the benefit of the best judgment of an*



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impartial physician, owing no allegiance to carrier, employer, medical service agency, or even employe, and free even from any interest in the financial return for several in any particular case".

It was emphasized that "until that problem is solved, there can be no real cure for such abuses in medical service as":

1. The premature discharge of the injured employe from hospital.

2. The failure to provide proper specialist service.

3. The reference of employes for treatment to places excessively distant from their homes.

4. The premature discharge of patients from treatment, "an evil the gravity of which may be judged from the fact that in a test conducted by the industrial council 40 per cent of the cases examined were declared by impartial medical opinion to have been prematurely discharged".

5. The pervasive mistrust on the part of patients of the physician attending them, a condition prejudicial to the patient's morals and his speed of recovery.

Periodic Health Examinations Advocated By United States Public Health Service

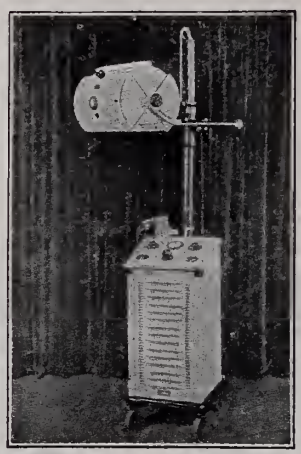
After the age of forty years the human body, instead of continuing to develop in strength and energy, begins to degenerate, and therefore it is of the highest importance that persons reaching that age should without fail have a complete physical examination at least once or twice a year, according to a bulletin recently issued by the U. S. Public Health Service.

The bulletin also calls attention to the number of deaths occurring in men about 45 years of age, attributed to "stroke," apoplexy, cerebral hemorrhage, or some other term, "but all indicating that an artery gave away, that a blood clot formed and that paralysis or death resulted." The truth of the saying that a man is as old as his arteries, he added, is demonstrated almost daily. The full text of the statement follows:

The truth of the saying that a man is as old as his arteries, is demonstrated almost daily in the newspapers by items recording the sudden illness or death of some prominent man. The cause is variously stated as a stroke, apoplexy, cerebral hemorrhage, or some other term but all indicating that an artery gave way, that a blood clot formed and that paralysis or death resulted.

Generally the newspaper item records the fact that the man so stricken was of middle age, prominent and frequently at or near the height of his career. Two instances of this kind have occurred recently. Shortly before the national conventions a man prominently mentioned as a candidate for the presidency died suddenly from a stroke just before he was to make a speech in

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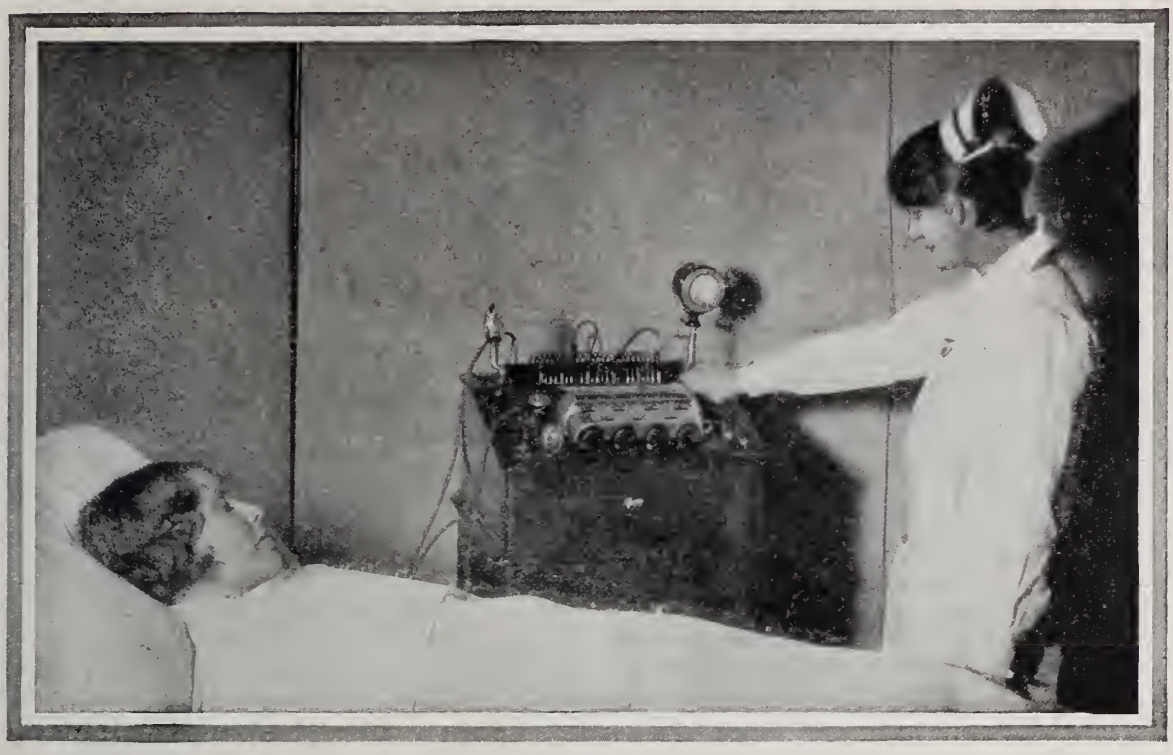
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Each year has added evidence to the value of this product in the prevention or relief from symptoms of Hay Fever, and each year an increasing number of physicians have familiarized themselves with the Hay Fever problem and are relieving patients of their seasonal attacks.

Full information upon request

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An Effective Ally in the Treatment of Pneumonia

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In the above illustration the apparatus proper is shown mounted on a floor cabinet, from which it may be lifted and conveniently taken in your auto to the patient's home.

A REPORT from the Department of Physiotherapy of a well-known New York hospital, dealing with diathermy in pneumonia and its sequelae, states as follows:

"As a rule diathermy is indicated in acute pneumonia, especially so when the symptoms are becoming or already are alarming: the temperature is high, the patient is delirious, the pulse is extremely rapid, cyanosis is deep, the respiration rate is high, the breathing is very shallow, and the cough remains unproductive. Not infrequently in a pneumonia case with such alarming symptoms, after a few diathermy treatments an entire change of the picture takes place: cyanosis lessens, respiration becomes deeper, the quality of pulse improves, the rate decreases, the temperature is lowered, and the cough becomes productive. Auricular fibrillation that develops occasionally in similar pneumonias or other types of pneumonia where the toxemia is great, has been changed to a perfect normal rhythm after a few diathermy treatments."

You will value diathermy as an ally in your battles with pneumonia at this season, aside from the satisfaction derived from having utilized every proved therapeutic measure that present day medical science offers.

A reprint in full of the article above quoted, also reprints of other articles on this subject, will be sent on request.

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Columbus, 76 S. 4th St. Cleveland, 4900 Euclid Ave., Room 412-15. Cincinnati,

his own home town. A few months ago, a man, who was very active in public affairs in New York State also came to the sudden end of his human existence.

It seems a pity that people of great use to the world should be cut down at a time of life when they are of most service. The purpose of this talk is to emphasize that in the vast majority of instances such deaths are needless if persons of middle age will only observe a few simple rules.

Note that most of the persons who are so stricken are usually 45 or over, frequently overweight and under the strain either of public life or business connections which require work under pressure, attendance at banquets or late gatherings and, in general, irregular hours for eating, sleeping and exercise, thus breaking three of the most important rules for maintaining a healthy body.

We may not want to believe it, but the fact remains that after 40 with most people, the human body, instead of continuing to develop in strength and energy, begins to degenerate. It is therefore of the highest importance that persons reaching that age, if they haven't already formed the beneficial habit, should without fail have a complete physical examination once, or better, twice a year by a reliable physician. Such an examination should include not only the heart and lungs but blood pressure and all the other tests included in the standard health examination blank.

But how will such a procedure protect a person from hardening of the arteries, from heart disease and the other degenerative diseases of middle age? The answer is simple. Just as it is easy to blow out a match, but hard to stop a conflagration, so is it a relatively simple matter at the outset to check the insidious beginning of these diseases through removing their cause, but it is a difficult if not an impossible task to effect a cure once the condition has progressed to any great extent.

Have a health examination at least once a year. Select your birthday as an appropriate time.

Major General William M. Ireland, surgeon general of the U. S. Army, has announced that his department has completed a history of the United States medical forces during the World War. It is in 15 volumes and two of the volumes have two books. The War Department is still working on its official history of the World War and may not complete it until 1940, it has been announced.

The Cancer Research Fund of the Grand School of Medicine, University of Pennsylvania, has received a gift of $210,000 from a philanthropist who does not desire to have his name revealed, Dr. Josiah H. Penniman, provost of the University has announced.

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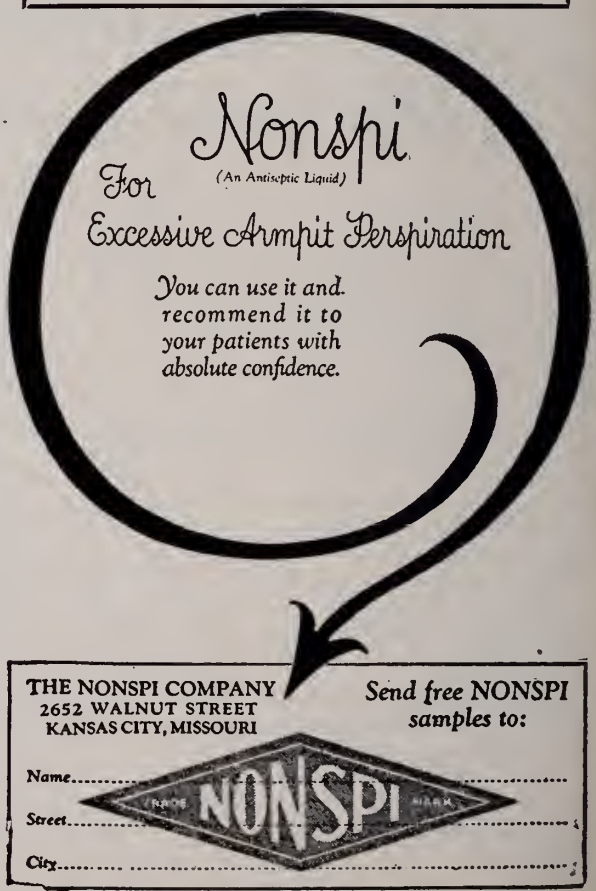
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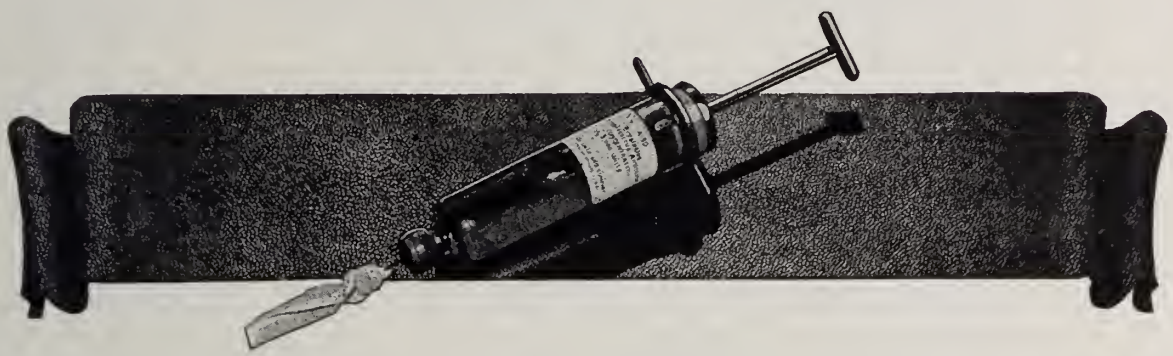
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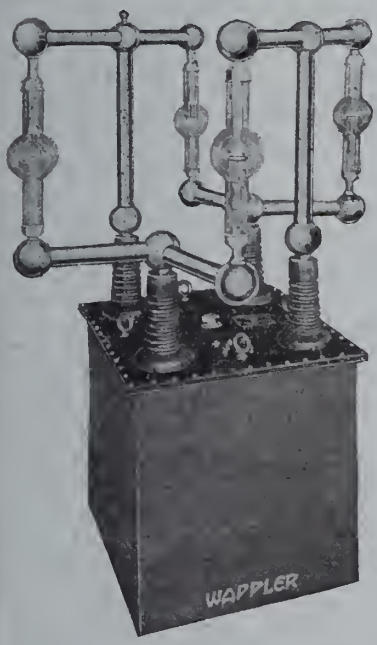
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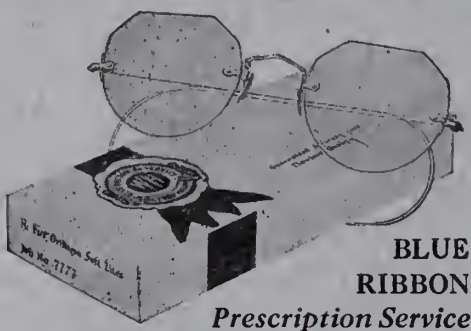
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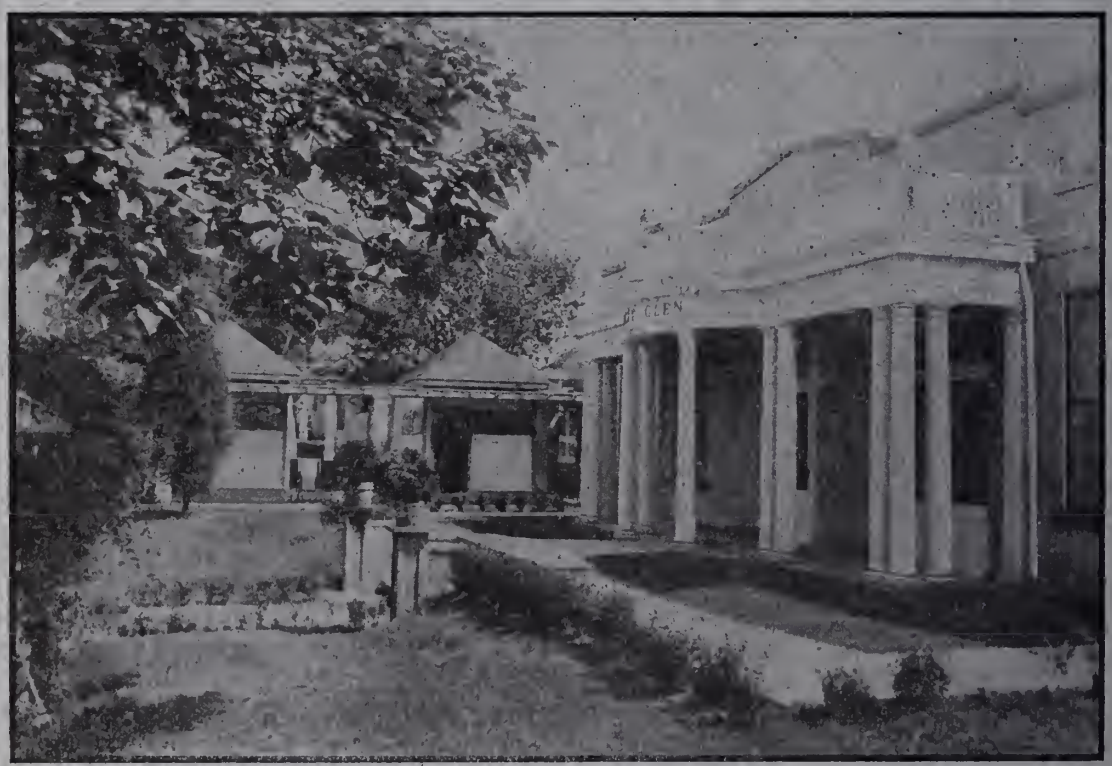
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Eighty-Fourth Annual Meeting, Columbus, May 13, 14, 15, 1930

The OHIO STATE MEDICAL JOURNAL

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AS A MEDIUM OF SERVICE TO ITS MEMBERS

APRIL 1, 1930 VOLUME XXVI
Number - - 4

Annual Meeting Program

Complete official program and other detailed announcements.
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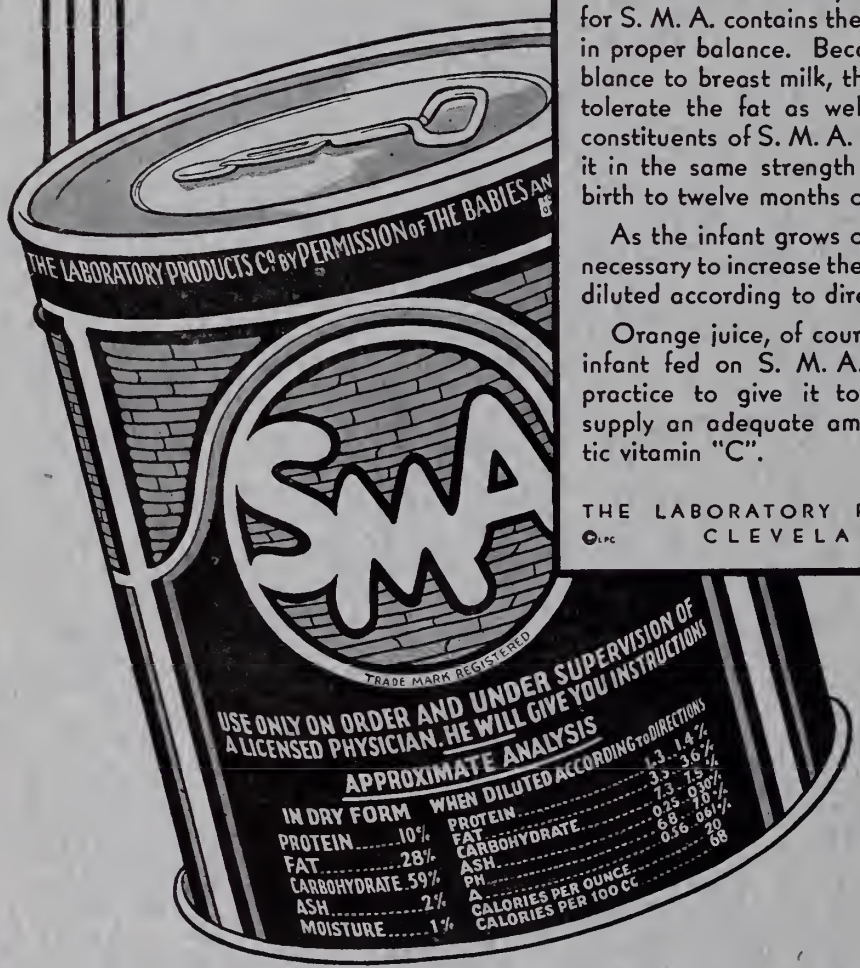
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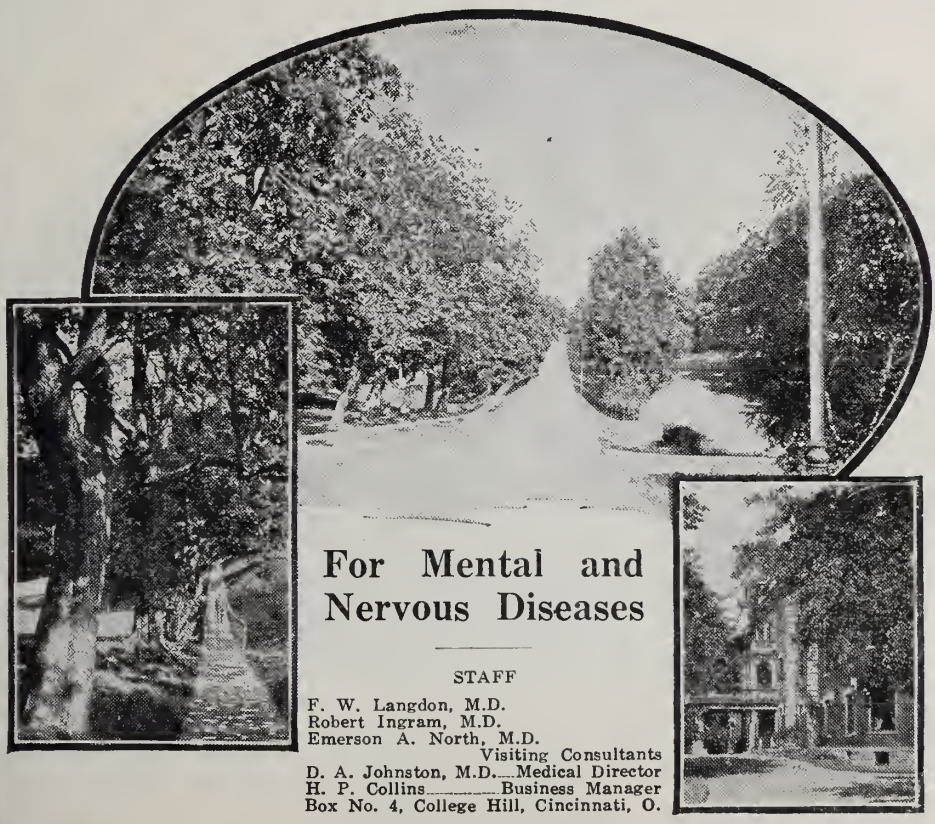
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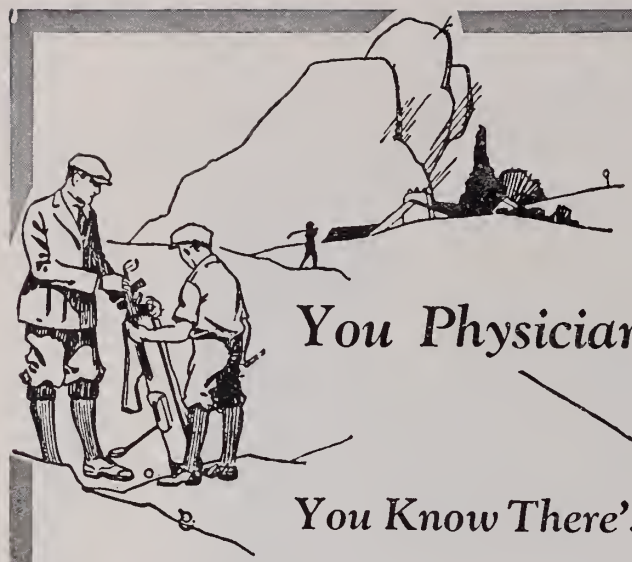






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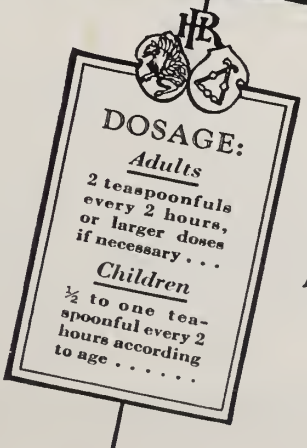
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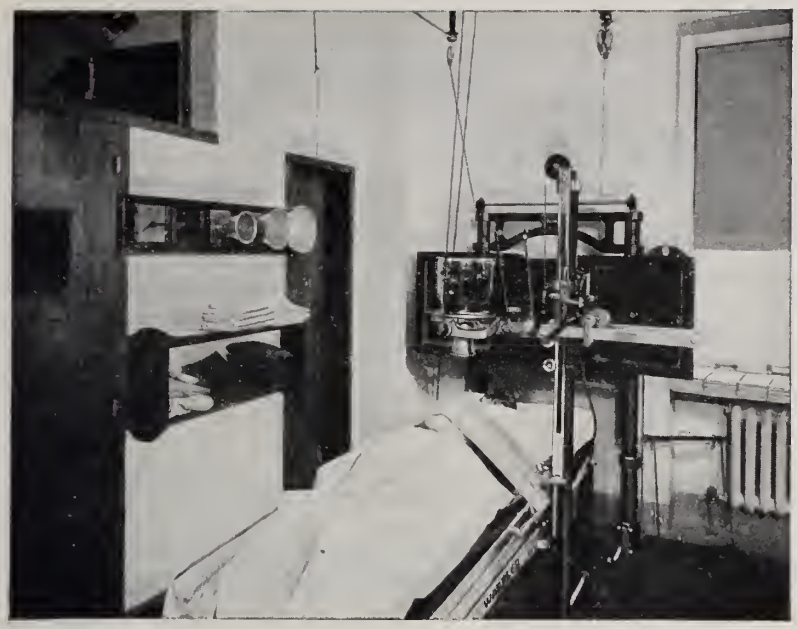
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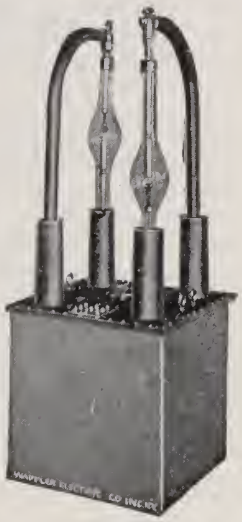
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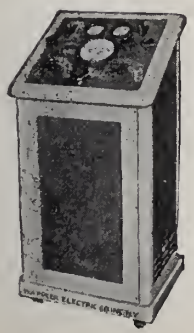
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PUBLIC HEALTH — SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Your Annual Meeting

Publication in this issue of *The Journal* of the program for the Eighty-Fourth Annual Meeting of the Ohio State Medical Association to be held Tuesday, Wednesday and Thursday, May 13, 14 and 15, at the Neil House, Columbus, serves as another official call for this important annual event in Ohio's medical history.

Every member of the State Association should endeavor to attend this state-wide gathering of the medical profession. Indications are for a record-breaking attendance, due to the high standard of the program and the central location of Columbus.

It is urgent that those expecting to be present should make their hotel reservations immediately. A list of first-class and centrally located Columbus hotels is published elsewhere in this issue of *The Journal.*

The various committees of the Columbus Academy of Medicine in charge of local arrangements are hard at work. Everything possible for the convenience and entertainment of visiting physicians is being considered. The arrangements and set-up afforded by the Neil House, where all activities of the gathering will be staged, are considered by local committeemen to be the best possible available in the Capital City.

Ohio's golfing physicians will have the honor of opening the annual meeting, unofficially, on Monday, May 12, when the annual tournament of the Ohio State Medical Golfers' Association will be played at the Columbus Country Club. The sport program will terminate in the evening with the annual banquet and awarding of prizes.

On the same day, early arrivals will be afforded the opportunity of attending medical and surgical clinics. These will be held on Monday at the various Columbus hospitals and medical centers. Arrangements for the clinics are now being completed and schedules for them will be announced later.

Official opening of the annual meeting is scheduled for Tuesday, May 13, at 9:30 a. m. when a general session will be held in the Main Ball Room, Northwest Corner, Mezzanine Floor. This session will be followed immediately by the first meeting of the House of Delegates. Among the important matters to be considered at this opening business session is that relative to adoption of proposed amendments to the Constitution and By-Laws of the State Association. These amendments were published in the March, 1930, issue of *The Journal.* Each delegate is urged to give them careful consideration between now and the annual meeting, if he has not already done so.

The six scientific sections will get underway on Tuesday afternoon in the various meeting rooms indicated in the program.

One of the features of the program for the 1930 meeting will be the annual dinner of the State Association membership, a function which at one time occupied a prominent place on annual meeting programs but which was dropped several years ago.

This banquet will be held Tuesday evening at which the president, Dr. A. H. Freiberg, Cincinnati, and president-elect, Dr. C. W. Waggoner, Toledo, will deliver their presidential and inaugural addresses. Several other features for the banquet program are being planned, preceding the informal reception for the president and president-elect.

Meetings of the scientific sections will open the Wednesday program. These will continue until noon when the annual organization luncheon will be held. Motion pictures on various scientific subjects will be shown in the Main Ball Room after the luncheon and while the second session of the House of Delegates is being held for the purpose of electing officers, acting on resolutions and selecting the meeting place for the 1931 annual meeting.

The annual scientific orations are scheduled for Wednesday at 3:30 p. m. Dr. L. G. Rowntree, Rochester, Minnesota, and Dr. John Osborn Polak, Brooklyn, N. Y., are the essayists.

Social, economic and educational phases and problems of medicine and medical practice will be discussed at the general session held Wednesday evening in the Ball Room, starting at 8 p. m.

"Medicine—Profession or Business?" is the subject of an address to be made at this session by Dr. L. L. Bigelow, Columbus, former president of the State Association. The second speaker on the Wednesday evening program will be Dr. Willard C. Rappleye, New Haven, Conn., director of study for the Commission on Medical Education, and a recognized authority on medical education. The subject of his talk will be "Medical Problems and Education".

The Columbus gathering will conclude Thursday noon at the termination of the last general scientific session, under the joint auspices of the medical and surgical sections. Speakers at this

final session will be Dr. Cyrus C. Sturgis, Ann Arbor, Michigan, and Dr. Charles L. Scudder, Boston, Massachusetts.

Every member of the State Association should watch for and give special consideration to the annual reports of the standing and special committees of the State Association, to be published in the May issue of *The Journal*. These reports discuss many of the vital problems and questions faced by scientific medicine and the medical profession in Ohio.

Relative Living Costs

Interesting revelations concerning the changes which are taking place in the standard of living of the nation have been made in some of the recent surveys which have been conducted in industry and in the financial field.

R. W. Moorehouse, vice president of the Securities First National Bank of Los Angeles is author of the statement that during 1929, banks lost ground in savings deposits and savings depositors for the first time in 20 years, there being 400,000 fewer savings depositors in 1929 than in 1928.

On the other hand, tremendous increases in the sales of certain products classed as a luxury have been noted.

For example, in 1910 there was one automobile to every 265 persons; in 1928, this figure has changed to one to every six persons.

The growth and development of radio is another example. On January 1, 1928, there were 7,500,000 radio sets in use in this country. In the past two years, this number has increased greatly, the ratio being in all probability at least one set to every 10 persons. And, the slogan of the radio industry now is a radio in every room, the idea having originated no doubt from the slogan "Two Autos for Every Family" so extensively advertised by the automobile industry.

These are but two concrete illustrations of the changes in living standards which have taken place. It is well known that great increases have been shown in other lines, such as installment buying, speculation, electrical devices, foreign travel, amusements of all kinds, time-and-labor-saving devices, etc.

As pointed out by the National Committee on Recent Economic Changes:

"We have become steadily less concerned about the primary needs—food, clothing and shelter; we have long since lost all fear concerning our food supply, and so we no longer look on food as a luxury or as a primary source of pleasure. . . . Our wants have ranged more widely and we now demand a broad list of goods and services which come under the category of 'optional purchases.'"

What place in this picture has medical care and medical services? The advancement in medical care is definitely associated with changes in the standard of living.

One financial publication points to the shrinkage of savings deposits as an indication that many people are living, maintaining standards beyond their means. Numerous leaders of the medical profession cite the same cause for the inability of many families to meet the cost of medical service. This does not indicate that the cost of medical service is too high, but rather that the price many families can afford, under present conditions, does not seem to meet the cost of medical services.

Some critics maintain that efficient medical services must be furnished the public at low costs—costs much smaller than those prevailing at the present time. That this can be done without jeopardizing the best interests of the public and further advancement of medical science, as well as the economic solvency of the medical profession, is a very debatable question. Many leaders of the medical profession are inclined to believe that such a readjustment would lead to a commercialized, mechanized medical profession, dependent on the state or rich corporations for their support, which, obviously would react against public health and welfare.

Too many individuals who have done extensive writing on the question of medical costs have been inclined to place the cart before the horse. They would solve the problem by decreasing the prices charged for all kinds of medical services, starting first of all with the physician's fee, instead of working out some plan whereby the financial status of families might be raised to meet the cost of medical services, which in the majority of cases is fair and reasonable.

The problem, as summed up by Dr. Morris Fishbein, editor of the *American Medical Association Journal*, in an article published recently in the *Outlook and Independent*:

"It remains for some real economist to work out a plan which will guarantee saving and will make the average man realize that he will be better off if he has sufficient funds to pay for the care of his family in disease than if he has a motor car, a radio, or a piano in times of health."

Soviet Object Lesson

Recent newspaper dispatches, apparently smuggled through the rigid censorship set up by Soviet Russia, reveal that doctors in the Soviet Republic are no longer permitted to render private treatment or maintain private offices.

Patients must obtain medical advice and treatment from state doctors, those not classified as workers being compelled to pay a fee for such service, Moscow dispatches say.

It is especially significant that one reason

given for this new order of the Soviet government is that "the government sees a shortage in doctors because so many young people in Russia prefer studying to become engineers rather than doctors". The reason for this seems quite obvious after analysis of another paragraph which shows that the average doctor receives a salary of 100 roubles ($50) a month from the government, while the average engineer receives four times that amount. Soviet officials hope by giving special privileges and exemptions to state doctors to induce more young people to study medicine, it is pointed out.

A United Press story under a Moscow dateline gives a graphic picture of conditions now throughout Russia. This article said in part:

"Faced by the superhuman task they laid out for themselves, the leaders in the Kremlin have gone back to the fighting mood of the period from 1917 to 1920. The policy today is that 'the end justifies the means'. The Soviet is through with compromising with capital.

"The struggle against private trading has been found easy in the cities. Private traders, called 'Nepmen', offer little resistance to the repressive acts that are driving them out of business. By hundreds and thousands their little shops are closing down.

"Lawyers and physicians no longer are engaged in private practice. Their work has been socialized. All other 'free' professions are rapidly being absorbed into government agencies. In effect it is like a military draft.

"The great masses of peasant farmers, too, are being placed under the control and at the disposition of the state. Under revised plans now being rushed through by the tightlipped theorists in Moscow, there will be a 100 per cent socialization of farms within the next two years. In other words, private farming simply will be abolished. . . . .

"Throughout everyday life, this drive for complete socialization is reflected. The great need for exports to pay for importations of foreign machinery for the collectives has curtailed the provision markets. The shelves of food shops in large cities are approaching bareness, and the shortage of food even in Moscow is too serious to be overlooked by anybody who lives here."

Russia has become the chief testing ground for new, radical and unsound theories of government.

The present demand in America for super-regulation is another example of the world-wide move for development of these new theories and a modification of certain old and fundamental ones.

As one writer declared editorially recently:

"There is no power like that of the state, no power that can intrench itself so firmly, that leaves so little room for appeal or that requires such heroic efforts to modify. . . . Now we are hearing a great deal about economic tyranny, because of what this or that great combine is doing in some particular field, but we shall never know the thing in its true light until the government goes into business or business goes into the government.

"A thousand years ago, religion and politics combined to dominate human affairs—sometimes with one in the saddle, and sometimes with the other, but with the thought of a close alliance predominant in either case. . . . Right now business and politics are tending toward a similar alliance with the idea of a superstate, based on the control of industry uppermost in a good many minds. This means that commercial prestige rather than justice would be the object, and that people would suffer from the same old tyranny that always arises when the government steps out of its natural sphere to take on the role of reformer.

"Our fathers regarded government as an institution of defense against that very thing and sought to restrict it from alliance and crusades of every character. They accepted mass improvement, or evolution if you prefer, as the product of individual leadership, and for that reason they made individual freedom the primary object of government."

The evils attending the creation of a super-government, bringing about the extinction of personal initiative and identity, have been adequately demonstrated in Soviet Russia and should be a warning to other nations, which so far have escaped the bonds of complete state-control, but who are being shot through with the preachments of those who favor bureaucratic domination of the individual in every form.

The Shifting Distribution

Figures announced recently by the Bureau of Agricultural Economics of the U. S. Department of Agriculture shed additional light on some of the phases underlying the question of distribution of medical service.

Statistics compiled by the Bureau reveal:

That the total farm population on January 1, 1930, was 27,222,000, as compared to 27,491,000 on January 1, 1929, a decrease of 269,000.

That 1,876,000 persons moved from farms to cities during 1929, as compared with 1,923,000 in 1928.

That 1,257,000 persons moved from cities to farms last year, as compared to 1,347,000 in 1928.

Analysis of the foregoing estimates explains to some extent one of the reasons for the tendency of a majority of medical college graduates to settle in urban instead of rural communities.

Migration of the population is among the fundamental factors affecting the distribution of all lines of endeavor, including medical service.

A community's responsibility in the matter of supporting local enterprise was expounded some time ago in the editorial columns of *Forbes*.

"During a discussion on the large number of small banks that had failed, in the United States during recent years, one champion of independents as against chain or group banking remarked that in many cases it was the community rather than the bank that ceased to flourish", the editorial declared.

"That was a pointed observation. The parcel post, the automobile, the motor bus, the mail-order business, mass production, etc., have brought about an economic revolution, an evolution not always beneficial to small communities and local businesses. The decline in our rural population has naturally meant a decline in the number of rural business establishments, including banks.

"In other words, it is true that in many instances it was the community that failed."

The point emphasized by *Forbes* applies also to medical services. As long as a rural community is financially able and willing to give physicians a financial return adequate to meet their needs and a fair return on their professional investment, the community need not worry about a shortage of medical services. In other words, medical services, like all other necessities of life, depends to a large extent on the readjustment of economic conditions and on the basic principle of supply and demand.

An Enormous "Social Service" Expense

The enormity of the financial burden with which Great Britain has saddled itself through its complicated and seemingly endless chain of social service schemes, subsidized by the government in full or in part, is revealed in a recent analysis of the funds spent by these socialized public services.

Some of the social services, other than the Poor Law which has been in operation in England for many years, are:

Old age pensions; blind pensions; widows' and contributory pensions; national health insurance; infectious disease hospitals; maternity and child welfare services; tuberculosis service; venereal disease service; lunacy service; mental deficiency service; highlands and islands medical service; employment exchange system; unemployment insurance scheme; relief works; juvenile employment centers; training of unemployed women; provision of meals for school children; school medical service; treatment of war veterans; war pensions; special grants to veterans; vocational training for veterans; employment for veterans, and resettlement service for veterans.

During the year 1926 the money spent by the government on social services reached the staggering total of 351,515,957 pounds. The total cost of all such services for 1928 has not been computed but the costs of some of the larger services for last year have been estimated as follows:

Health insurance, 38,985,000 pounds; widows' pensions, 7,534,000 pounds; unemployment service, 56,160,000 pounds; war pensions, 60,390,000 pounds; old age pensions, 30,912,000 pounds; educational acts, 93,061,000 pounds, a total of 279,615,534 pounds.

For some of the services, for example the health and unemployment insurance and the widows' pensions, the recipients have paid something, but the large majority of the long list are all non-contributory.

Despite strenuous opposition to this wholesale socialization of the population, England's social service bill continues to increase each year, the increase during the past five years being 85,000,000 pounds.

Cigaret Propaganda

Tobacco and tobacco products will be included within the scope of the pure food laws if a bill presented by Senator Smoot of Utah and pending in Congress becomes a law.

Senator Smoot's measure is an outgrowth of the advertising campaign cigaret manufacturers have been carrying on and which has been criticized by various organizations.

The campaign of the tobacco interests was denounced by Senator Smoot as "unconscionable, heartless and destructive attempts to exploit the women and youth of our country".

"Ten years ago when in certain quarters of our metropolitan cities a saloon flourished on every corner, no tobacco manufacturer had the temerity to cry to our women: 'Smoke cigarets—they are good for you'," Senator Smoot declared. "When newspapers were filled with cure-all and patent medicine advertising, no manufacturer of a tobacco product dared to offer nicotine as a substitute for wholesome food; no cigaret manufacturer was so bold as to fly in the face of established medical and health opinion by urging adolescent boys or young girls to adopt the cigaret habit.

"Not since the days when public opinion rose up in its might and smote the dangerous drug traffic, not since the days when the vendor of harmful nostrums was swept from the streets, has this country witnessed such an orgy of buncombe quackery and downright falsehood and fraud as now marks the current campaign promoted by certain cigaret manufacturers to create a vast woman and children market for the use of their product."

Chronic Nephritis With Hypertension Observations on Diet and Etiology

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IN reviewing the subject of hypertension from the standpoint of diet and etiology, we have in mind two forms of chronic nephritis. They include two conditions of perhaps different origin but of similar therapeutic indications: First, secondary contracted kidney (small white kidney or chronic glomerulo-tubal nephritis); second, primary interstitial nephritis (the small red granular or arterio-sclerotic kidney.)

Septic foci, infections and intoxications have been accepted as etiologic factors in the production of the small white kidney. The prognosis in this form of nephritis depends a great deal upon the early recognition of the cause and a prompt exclusion of the same if possible.

The etiology of the arterior-sclerotic kidney is in doubt. Many authors regard the condition as primarily vascular in origin and of unknown etiology. Sclerosis of the blood vessels of the medulla bringing about an anaemia of the vasomotor center has been assigned as a cause while another writer observes that the hypertension may precede these vascular changes. Similar claims have been made in regard to the blood vessels of the kidneys and vice versa. Chronic infection may not be a factor, nevertheless, a painstaking search should be made in all cases of hypertension, and all foci of infection removed as a preliminary to the proper management and care of the case. Infection lowers vitality and must be weighed as a factor in all arterial disease.

The public in general at the present time has been educated to regard the elimination of chronic infections as a safeguard to health. The removal of a few devital teeth or questionable tonsils, so far from being a radical measure, is wholly a simple and essential one. In fact, the sole excuse for not cleaning up focal infection in chronic vascular disease is when the patient has been seen too late and after a malignant hypertension has developed with a pronounced involvement of the heart, blood vessels and kidneys.

According to Allen,[1] sensitization from chronic infections may be a factor in the production of chronic vascular disease. After a severe infection the organs of the body, kidneys, blood vessels, etc., may apparently make a complete recovery but they are left as a *locus minoris resistentiae* for subsequent infections and intoxications. "Pyorrhoea, chronic sinus and tonsil infections, which are too low grade to break down the vitality of normal organs, suffice to set up irritation in the impaired organs and gradually increase the damage in them. It is possible that alcohol, tobacco and even constipation and other minor influences may likewise be capable of producing injuries in previously damaged organs."

We have examined the histories of 8,414 cases. Of this number 47% were men; 53% women. Two thousand one hundred and twenty-six or 25%+ had a systolic pressure above 150—men 40%—women 60%. As to the presence of foci of infection, an accurate statement cannot be made. Many of them, of course, still had their tonsils, a certain number had devital teeth, and not a few of them, pyorrhoea. Others gave a history of sinus or antral involvement and in some cases the gall bladder, appendix or pelvic organs were questioned. We have invariably advised the removal of all known foci of infection in suitable subjects. In many cases the results obtained are most gratifying; in other cases there has been no apparent benefit. Focal infection seemed to be equally common in this group of patients whether they had or did not have increased blood pressure. Furthermore, it is next to impossible to exclude focal infection in any given case. Chronic infection is the sole agent in a certain group and it is probably a factor in the arterio-sclerotic group. If it be advisable to remove focal infections to prolong the life of a healthy subject it is of equal or even greater importance to eliminate all chronic infection in a so-called benign hypertension.

HEREDITY

Many references in literature call attention to the presence of a constitutional diathesis as a factor in high blood pressure. Elevation of blood pressure is far more common in an individual with a short neck and chest and a red face—"the roly poly, John Bull type." On the other hand, we see not a few patients of the hyposthenic habit with hypertension. In these cases, in most instances, we can trace the etiology to a previous infectious disease, existing foci of infection, syphilis, etc. "Weiss from an extensive study of family trees showing the results of hypernormal pressures concluded that high blood pressure was a constitutional disease and that it was a dominant Mendelian characteristic." (Rolleston)[2]. Thus, the question of inheritance seems to be a strong factor as a cause for increased blood pressure of a certain type. Another author states that heredity is not an important factor but that hypertension develops as the result of familial environmental influences. By imitation the child acquires the habits and traits of the parent. The horizon of the child is narrow. There is a pride in following in the footsteps of the parent who

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leads a tense, single minded existence devoid of any form of relaxation. Thus, hypertension in reality is a state of nervous irritability. The individual who has inherited a highly sensitive nervous system should be discouraged from entering careers in which a high tension life is necessary. The individual may inherit the physique and blood vessels of the parents: he may also inherit a hypersensitive nervous system with a tendency to react to the stress and strain of modern living. Psychic strain, long hours of mental effort, sedentary life, etc., may increase the blood pressure of an individual already having hypertension although these factors alone have no etiologic connection.

It is impossible to obtain a satisfactory family history in all cases. In our group there was a history of a cardio-vascular-renal disease in both parents in 13%—mother, alone, 8.3%; father, alone, 35.9%—clearly negative family histories in 34.5%—parents negative but brothers and sisters positive in 8.3%. The apparent higher inheritance through the father may be due to a greater frequency of cancer as the cause of death in the female before she reaches the age in which hypertension develops. Furthermore, the female with hypertension, owing to different habits of life, lives longer than the male and ensuing death is assigned to some cause common to old age.

The incidence of hypertension for decades between men and women is interesting. Between 20 and 30, the male out-numbers the female a little over 2 to 1. A reasonable explanation for this is, excesses in alcohol, tobacco, venery and resulting infections. Ninety-two or 4.3% of our hypertensive group showed a positive Wassermann—69% were men. Between 30 and 40, the men still out-number the women by a slight margin probably owing to their habits in the preceding decade. Between 40 and 50, the period of menopause, women out-number men by 5.5% and again between 50 and 60 by 4.3%. Between 60 and 70, the men lead by 6.5%—between 70 and 80, by 0.6%. Between 80 and 90 the proportion is equal. Eighty per cent of the cases of both sexes fall between the ages of 40 and 70.

A most plausible and interesting conception as to another factor of etiology in hypertension was recently discussed in a paper by Rappaport who cites the investigations of Tirella[3] and other writers. These authors believe that blood pressure is influenced by respiration. Hyper-ventilation tends to reduce blood pressure; they have found a marked reduction in blood pressure in hypertensive disease after systematic deep breathing exercises. Inspiration retards the flow of blood to the left heart. Deep breathing increases the amount of blood to the lungs for aeration and the distended lung lessens the return flow to the left heart. The belief that exercise increases the blood pressure is wrong. As a rule, athletes have a low blood pressure. The reduction of output of blood from the left heart lowers pressure and is due to retained blood in the distended vascular bed of the lesser circulation. The physiological factors on which blood pressure depend are:—the pumping action of the heart; the peripheral resistance offered to the flow of blood in the arteries and the elasticity of the arterial walls; and the volume of circulating blood. The increased volume of circulating blood has been ascribed to an abnormal function of the blood reservoir. The lesser circulation has the widest capillaries and with inspiration may hold 1/12 of the total blood volume. It may be reduced to hold 1/60 of the total blood volume.

The author calls attention to the well known fact that persons with a short chest and neck and a high diaphragm, the hypersthenic type, have a tendency to increased pressure, while the asthenic type with a long chest and low diaphragm usually shows a low blood pressure. Excess abdominal fat, intestinal flatulence, in short, intra-abdominal pressure by interfering with the normal movements of the diaphragm indirectly may be a cause of hypertension.

"Hypertension is chiefly a disease of middle life, a disease of the involution period. Metabolic processes are on their downward grade: the internal secretions are less active; oxygen consumption is lessened." The respiratory function adapts itself to the reduction of the oxygen consumption hence respiration is gradually restricted: under-exercise and over-feeding tend to restrict the respiratory activity; thus, a relative hypo-ventilation follows in middle life. The circulating blood volume is increased by lack of pulmonary expansion limiting the amount of blood in the lesser circulation. Due to a constant under-expansion of the lungs the continued increase in volume of circulating blood from the left heart raises the blood pressure. Sooner or later this over-work results in cardiac hypertrophy as well as interstitial changes in the blood vessels and kidneys.

Along the same line of reasoning, we may explain low blood pressure in the asthenic type of individual; the so-called enteroptotic. In most instances these individuals present complaints which may be attributed to vasomotor instability. This lack of vasomotor control gives rise to increased capacity of the circulation as the result of the loss of peripheral resistance of the arteries, as well as the loss of muscle tone, resulting in lack of support to the blood vessels. The enteroptotic has very little abdominal fat. Even though the abdomen is relatively short, the visceral blood vessels furnish a considerable reservoir for blood. This increased capacity of the vascular system of the greater circulation results in a diminished return of blood to the right heart and leads to a lowered blood pressure. At the same time, this type with a long chest and

low diaphragm has also a greater vascular reservoir in the lesser circulation which would lower the blood volume to the left heart.

Thus hypertension has been attributed to an increased blood volume of the left heart due to lack of pulmonary expansion limiting the amount of blood in the lesser circulation. Substantiating this in hypotension, with a limited amount of blood carried to the heart through the greater circulation, and a diminished blood volume from the left heart, we find coincident a lowered blood pressure.

NORMAL AND HYPER-NORMAL BLOOD PRESSURE

Allbutt has defined the extremes of normal blood pressure as 140/90 for adult life (in spite of age). Dunham[4] has studied the blood pressure of 8,645 army officers without physical defects. The systolic pressure up to 50 averaged 127 mm. Hg. From 50 to 64, 134. There is a very slight increase for age, as well as for overweights. With underweights the pressure is slightly lower. Alvarez claims that a systolic blood pressure of more than 130 in a young man or more than 140 in the older man is probably abnormal. The blood pressure sitting in a chair is slightly higher than in a reclining position. Anyone with an increase in pressure is apprehensive and nervous during the blood pressure estimation. The pulse rate will probably increase slightly. These patients should rest in a reclining position for a few minutes and try to get mind off of self. Even then the first systolic reading may be 15 to 25 points higher than estimations made a few minutes later. Nervous excitation from watching the movements of the mercury may add to the pressure.

Before branding any patient as a case of hypertension, it is of great importance to consider psychic and emotional factors, fatigue, nervous tension, etc., as to their possible influence upon the blood pressure of the individual at that particular time. The elimination of all of these factors should be undertaken before determining the basal pressure or the degree of hypertension. The lowest reading should be taken as the pressure for the day. Pressures taken under basal conditions, in cases of hypertension, as a rule, are 40 to 60 points lower than those taken in the office.

The diastolic pressures vary far less under nerve tension. Mistakes are sometimes recorded in the estimation of the systolic pressure by not pumping up the manometer to the proper degree. There may be an "auscultatory or silent gap" just preceding the loud third phase. In hypertension, we should always pump up the mercury to 250 if the diastolic pressure is above 100 in order to obtain the true maximum systolic pressure and to make sure to avoid this silent gap. The diastolic should be recorded at the lowest point of the mercury during its greatest excursion or just at the ending of the loud third phase. Elevation of the diastolic pressure as a prognostic indicator is far more important than the systolic. The individual with a diastolic pressure above 130 rarely lives beyond two years.

REST

Nerve tension raises the blood pressure of a normal individual very little. The man who comes to you Monday morning after a day of complete relaxation for a blood pressure reading, in order to get within the limits for life insurance, is probably a pre-hypertensive. Rest over Sunday has lowered his pressure; however, through the week during his working hours the pressure will be found slightly above the maximum normal. Such is the history, perhaps for years, of the individual with beginning hypertension. Rest is a very important part in the treatment of hypertension. The man who leads a strenuous business life should be advised to work half-days and to play the other half. If this is impractical he should at least lie down and take a nap after his noon-day meal.

Hypertensive patients should have a let-up from business activities three or more times a year. They cannot come home and make up for lost time. The restriction to three or four hours a day in active work is about their limit without a return of the increased tension. I recall one case, a banker, whose pressure ran around 220 mm. systolic. After a month of rest it would drop to 165. Upon return to work it would begin to rise. Within two weeks there would be a pressure of 215-220. Another patient with a systolic of 240 was reduced to 180 until his application to a Masonic Lodge was rejected. Nervous excitement of being "black-balled" increased his pressure to the former level. Nervous upsets which the patient cannot master and dismiss from mind invariably increase the blood pressure. The above illustrations furnish evidence of the importance of mental tranquillity. A simple life is essential; if it interferes with business, these unfortunates should retire.

DIET IN CHRONIC NEPHRITIS WITH INCREASED BLOOD PRESSURE

Owing to confusion in the minds of many physicians in regard to a high protein diet as recommended by Epstein for a rare form of chronic nephritis, this diet will be outlined and the reasons for its use explained.

The high protein fat-free diet introduced by Epstein several years ago was recommended for a form of chronic parenchymatous nephritis, presenting important characteristics differing from the usual type. The term chronic nephrosis was applied. The lesion is considered not wholly nephritic but rather a systemic disorder, metabolic in origin. As a rule it occurs in younger individuals and bears no definite relationship to infectious diseases. Epstein points out three factors etiologically: Frequency among

the poor, occasionally in association with pregnancy, and the constant association of hypothyroid states. He notes the following changes in the blood: a reduction in protein, an alteration of the normal albumin-globulin ratio, an increase in the lipoid and cholesterol content.

Edema is believed to be due to a disturbance of balance between the intra-capillary pressure and the osmotic force of the proteins and other dissolved substances in an individual whose blood is low in protein.

Epstein prescribed a high protein, fat-free diet in these cases to replace the great loss of albumin through the urine. The kidney lesion is considered of secondary importance. To quote, "Just as in diabetes mellitus we have a glycosuria and back of this a perversion in carbohydrate metabolism likewise in this disease we have an albuminuria and back of this a perversion of protein metabolism." Fat is excluded as long as lipoidemia exists. The carbohydrate intake depends on the appetite of the patient. No special limit is placed on salt. Sufficient fluid is given to prevent undue thirst.

The author states that the high protein diet is satisfactory in certain cases while in others, thyroid therapy also becomes necessary to bring desired results. Complete relief from so-called chronic nephrosis on a high protein diet with or without thyroid therapy has been reported by this author after a period of six to eighteen months' treatment.

The Epstein high protein fat-free diet has been recommended for a non-inflammatory type of chronic parenchymatous nephritis — so-called chronic nephrosis. The blood pressure is *not* increased. The disease comes on insiduously; it may be discovered accidentally by an examination of the urine. Sooner or later there is edema, oliguria, marked albuminuria, and likely, a well pronounced anemia. "The edema is due to a decreased osmotic pressure of the blood resulting from a diminution of the protein content of the blood serum, a condition directly due to the steady loss of large quantities of albumin in the urine."

These recommendations for a rare type of chronic parenchymatous nephritis in no way conflict with the diet proposed in this paper for chronic vascular disease. Epstein proposes a treatment where there is an unusual degree of albuminuria hence a blood stream low in protein content. Such a condition, as a rule, does not exist in chronic nephritis with hypertension. Edema is rare in this form of nephritis except in later stages and is due to other causes. Further, we do not have a reduction of the protein content of the blood stream because the albuminuria may be absent or there may be only a small degree throughout the disease. In fact, the treatment of Epstein's nephrosis and hypertensive states is as widely different as the treatment of diabetes mellitus and hypertension.

In absorption and assimilation, all foods are burned to an ash of the same type as they would be if burned outside the body. In the body, under normal conditions, proteins, carbohydrates and fats are burned to carbonic acid and ash. Through respiration, the carbonic acid is eliminated. If breathing is interfered with, a carbonic acid acidosis develops. The ash is non-respirable and may be neutral, acid or alkaline. The soluble ash content of the food is excreted largely by the kidneys. If foods containing an acid-ash predominate and if this ash is not properly eliminated by the kidneys it will gradually reduce the alkalinity of the body and produce an acidosis. (Sansum). In 1923, Sansum recommended the use of basic diets in the treatment of chronic nephritis. Lists of foods showing a net ash content were prepared by Sherman and Gettler and tested, in man, by Blatherwisk.

The neutral-ash foods are butter, cornstarch, cream, lard, sugar, and tapioca. Foods most productive of acid-ash are meats, eggs and grain foods. From the standpoint of acidity, chicken and certain fish are higher in degree than red beefsteak. There can be no argument to sanction the selection of the whitest meat of chicken or fish over the reddest beefsteak. The alkaline ash foods include milk, nuts, fruits and vegetables, except prunes, cranberries and plums. The acid ash of prunes, cranberries and plums is due to hippuric acid and is so low that these fruits need not be rigidly excluded. Allen asserts that the patient and a few physicians should be reminded that the fruit acids, lemons, oranges, tomatoes, grapefruit and most other fruits and all vegetables burn to carbonates and contribute an alkaline instead of an acid factor to the blood and urine.

On account of obesity, a predisposing factor to hypertension, certain carbohydrates, high in caloric value, may be denied to keep down weight. Those alkaline-ash foods high in purin should be excluded if there is non-protein retention. Fruits should make up a part of every meal. Many of our patients with high blood pressure have a tendency to obesity, therefore they deny themselves of carbohydrates such as potatoes, beans and peas, and any fattening food and eat freely of meats, to keep within weight limits. Their food intake brings about a highly acid urine due principally to eating acid-ash foods. In time the highly acid urine results in a low grade kidney irritation. Diabetics by necessity, without Insulin, must select acid-ash foods. Most diabetics, sooner or later, show evidence of cardio-renal disease, resulting probably from this enforced diet.

In 1923, Sansum reported a number of cases of cardio-renal disease treated by the basic diet. In these cases he records a drop in blood pressure, less vertigo, headache, dyspnoea and a less marked irritation of the kidneys as shown by

examination of urine. This improvement was not due to rest, hospitalization, starvation, hydrotherapy, sedatives, cathartics, vaso-dilators, etc. Fluids were not limited nor was sodium chloride restricted except in a few cases.

Owing to confusion and disagreement among physicians, in regard to diet in chronic nephritis, the inquiring patient is quite often mentally upset by the diversity of opinion. As a rule the patient does not feel ill; at least, his ailment is chronic. He may be told that he has a slight increase in blood pressure, perhaps an albuminuria. One of the first thoughts in the mind of the patient is diet. In hypertension, certain physicians tell their patients to satisfy their desires for food as to kind as well as to quantity if the patient is not overweight. Other physicians object to the use of meats, eggs, and sometimes without reason, potatoes, acid fruits and vegetables. In fact, if all the foods which have been denied in cardio-renal disease were to be mentioned the unfortunate patient would not have even water as a form of sustenance. Even though the physician is broadminded in regard to diet, some well disposed friend will inform the patient that a restriction in diet has been helpful in his own case. Therefore, the question of diet leads to anxiety and worry: all of which is most unsettling to the sufferer from an increased blood pressure. Hypertensive patients may live many years, in fact to the end of a normal life, hence diets will not be followed which impose undue restrictions. A diet to be practical and useful should be simple; in short, a modification of a normal diet. "The protein, sodium chloride and fluid intake should be suited to the ability of the patient to excrete them and their end products without an elevation of pressure. The acid-base balance should be adjusted in order to produce a urine as little irritating as possible to damaged kidneys."

The basic diet proposed by Sansum meets many requirements. The early hypertensive case may have any acid ash food. This includes all meats, except perhaps oysters, also eggs and foods from grain when taken in moderation and overbalanced at each meal by foods yielding an alkaline ash. Such a diet cannot be monotonous and, of greatest importance, it is easily understood by the patient.

It is unforgivable to inform a patient in whom you discover hypertension that it is of no consequence; that possibly his normal systolic pressure is 160 or more. Regardless of the peace of mind of the patient tell him that his pressure is somewhat above normal, that he must report for periodic examinations. Give the patient a hopeful outlook. Do not discuss complications which may arise. Lead your patient to believe that with diet, rest and other measures his pressure may subside. Thus be cheerful with your prognosis. Most cases are hopeful. Few cases are hopeless.

No discussion of vascular disease would be complete without mention of Allen's sodium chloride restriction as an important factor in treatment. Salt restriction has been a routine for years in the treatment of edema. "Hypertension requires a stricter salt exclusion than edema. A saltless diet is as prudent in a family with a history of high blood pressure as is a limitation of carbohydrates in a family with diabetes." Very little salt is excreted through the bowel or skin. Excretion is chiefly by the kidneys when not impaired. Salt retained in the tissues attracts water by osmosis giving rise to edema.

Polyuria at night is one of the earliest signs of edema in high blood pressure and may exist for years before there is superficial swelling about the face or ankles. Nycturia signifies a delayed excretion of fluid which is stored after absorption in the deeper tissues, and is eliminated at night as a result of improvement in the circulation after a nights' rest in bed. Excluding a free intake of fluids at night which is a habit in some instances, the excretion of 500 to 600 c.c. of urine or more of low gravity during the night is indicative of a well advanced cardio-renal disease with undoubted involvement of the kidneys. It is conceivable that this early retention of fluid is due to faulty function of the kidneys rather than to a true weakness of the heart. A good many writers are of the opinion that hypertension never exists with normal kidneys. The same may be affirmed in regard to the arteries.

Salt restriction is indicated in all cases of increased blood pressure. By limiting the NACL, there is less thirst, less fluid will be taken, therefore, less work required of the heart, blood vessels and kidneys. Fluid restriction should never be carried to the point of real thirst.

In early high blood pressure let us advise the patient in regard to the basic diet at the same time recommend a restriction in regard to salt. At subsequent examinations, the urine can be examined for the degree of acidity and the sodium chloride content. On a salt free diet it is difficult to get the urinary NACL below 0.5 gm., per day owing to salt in the foods. We have never encountered a case of salt deficiency (under 0.3 gm.) characterized by marked prostration, loss of appetite, etc.

Allen prepares a solution of 0.05% NACL, a second solution of 1% silver nitrate and 2% nitric acid, the acid holds the phosphates, etc., in solution while the silver precipitates the chlorides. Two tubes, one containing urine properly diluted and one containing a solution of a known amount of NACL will determine roughly whether the patient has followed directions in regard to limitation of salt. This test is simple and sufficiently accurate to show whether the patient has been conscientious in salt restriction. It requires no more time than the routine ex-

amination for albumin and should be run along with the chemical examination of the urine in all cases of nephritis with hypertension.

A high protein diet, long continued, will lead to nephritis and hypertension. The products of protein metabolism are removed from the body by the kidneys: excess protein food, therefore, increases the work of the kidneys. Overweights, unconsciously to keep down their avoirdupois, limit carbohydrates and fill up on proteins, especially meats. Meat eaters are heavy users of salt. Such a diet leads to copious fluid intake and at the same time an irritation of the kidneys from an excess of acid-ash food. The combination over a number of years is bound to give rise to a nephritis, plus an increased blood pressure.

The patient with hypertension who attempts a water cure either at home or at a health resort by taking an excessive amount of a well advertised "Cure all" water returns to his family physician with an elevation of blood pressure and perhaps, for the first time, a beginning edema of the ankles and face resulting from overwork on the part of the cardio-vascular renal system.

When the heart begins to fag and edema makes its appearance then we should order a salt *free* diet. For the hypertensive who is active in business we may outline a salt *low* diet i.e., very little salt in cooking, none to be added at the table, unsalted butter, etc. The urinary sodium chloride should drop below 2 gm.

In March, 1929, Dr. John C. Krantz, Jr., announced a substitute for table salt known as Eka Salt. Eka Salt is a sodium salt of malic acid obtained from apples. It satisfies the craving for salt and is burned up or metabolized in the body as an alkali producing food and is not retained in the tissues of the body as is common table salt in case of kidney impairment. Salt reduction has been most difficult to obtain. It is to be hoped that Eka Salt meets every requirement claimed for it. Patients trying this salt on food state that the rather free use of it meets every requirement from the standpoint of taste. This is true except for hot liquids such as soups. Table sugar is salt free while syrup and molasses are not. Milk cannot be taken too freely if we aim at a salt-poor diet.

The value of salt reduction and diet is seen in certain patients who go South for the winter. In the hotels and boarding houses it is impossible to follow out proper restrictions in regard to salt and an acid-base balance in diet. It is not unusual for them to return home with an elevation of 40 to 50 points in systolic pressure. Within a week or ten days of rest and dieting, the blood pressure assumes its usual level.

In patients with hypertension and peptic ulcer or gastric hyperacidity from any cause, bicarbonate of soda should not be used because this alkali with hydrochloric acid of the stomach forms sodium chloride. The Sippy treatment can be carried out by the use of calcium and magnesium compounds which are largely excreted through the bowel.

Cathartics will lower blood pressure in certain cases of hypertension with persistent intestinal flatulence. Allen advises pure magnesium sulphate; sodium phosphate and milk of magnesia. Avoid effervescent salts, Carlsbad, Humyadi, Pluto, etc., which will lead to an increased NACL of the body: also mineral waters such as Vichy, Kalak, etc. Allen says, "The dominant principle of treatment is to prevent the taking of harmful substances into the body, rather than to devise a means of eliminating them or counteracting their effects."

Upon discovery of increased blood pressure, the basic diet and salt restriction should be instituted at once—do not await nycturia and inability to concentrate for these symptoms are manifestations of a long standing hypertension with involvement of the arteries, heart, and kidneys. The basic diet and salt restriction lessen the work of the heart and kidneys, therefore, prolong life and make the individual more comfortable. Too many of these patients seek treatment at a time when the damage to their cardio-renal system is beyond repair. Too often, we as physicians, advise tonsillectomies, extraction of teeth, etc., in approaching malignant hypertension, when such a procedure is not helpful; in fact, is more than likely to result in a hasty dissolution.

At postmortem, chronic myocarditis is found in 85% of cases of chronic hypertension. In 50%, some form of heart failure is the cause of death. Of the remaining 50%, the majority die from renal failure or apoplexy. The cause of death in a few cases is an intercurrent infection.

In conclusion: Chronic nephritis with hypertension has a multiple etiology. Infections, intoxications, syphilis, etc., undoubtedly are factors in the production of the small white kidney. To be fashionable and ultra-scientific we must admit that the cause of the arterio-sclerotic kidney is unknown. We have discussed focal infection, the cardio-vascular, renal and nervous systems, heredity, environmental influences, obesity, endocrine dysfunction, respiration, variation in pulmonic areas. The case may be seen when it is impossible to differentiate clinically the two forms of nephritis with hypertension hence the importance of excluding focal infection as a valuable part of our treatment.

SUMMARY OF TREATMENT

1. Treatment depends upon etiology. In all cases eliminate infections and intoxications: correct faulty habits in regard to food, drink and activities (both physical and mental). Nervous hyper-irritability owing to business and social activities should be overcome. Tranquillity

of mind must be gained. Rest and relaxation are most important. In short, the patient should learn to lead a simple life.

2. The prognosis is grave for an individual with hypertension whose systolic blood pressure does not drop 50 to 60 mm. Hg. within a week of physical and psychological rest. Reassurance and confidence should be instilled through tactful handling of the patient: mental anxiety allayed.

3. The above recommendations apply to all patients; especially to the group where there is history of inheritance. If possible these persons should choose an occupation not requiring constant mental effort for success.

4. The male is more prone to hypertension before 40. We may question as factors, alcohol, tobacco, venery and the nervous strain incidental to a business career.

5. In our group of cases with ages from 40 to 60 we find that women outnumber the men by 4.9%. It is reasonable to attribute this variation to hyper-irritability of the nervous system resulting from menopause. This condition is, in no sense, a question of age. This nervous influence is further borne out by a relatively lower diastolic pressure for women at this period of life than for men of the same age. However, it is observed that women over a long period of time carry a lower diastolic pressure than the average man. Business worries and financial burdens more often fall upon the head of the household resulting in a more rapid progress of hypertension in the male.

6. In Grave's disease, a slight increase in systolic pressure is usual although with proper treatment and relief of thyroid intoxication the pressure will assume the normal.

7. The importance of deep breathing in the hyperaesthenic type should not be overlooked. One who reaches middle life and takes on weight must not neglect daily routine exercise. The amount and degree of physical activity depend upon the age and endurance of the individual. Golf can be recommended because it is more likely to be carried out regularly and is not too strenuous for the average hypertensive.

8. Diet. Peace of mind cannot be obtained by advising your patient with hypertension to select his food according to his liking. Well-meaning advisors and the daily press will cause him to question such a routine. Because we have a few overweights who claim to have reduced their blood pressure and weight by a heavy protein diet, there is no proof that such a diet is best in hypertension. Nephritis with hypertension is a chronic disease which runs many years. In damaged kidneys the products of protein metabolism become an irritant. Therefore, select a balanced diet least irritating to diseased kidneys. In fact, the intelligent person, at middle age, with normal kidneys attempts a balanced basic diet to conserve his kidneys and arteries in order to defer old age.

9. Saline cathartics are helpful in lowering blood pressure where there is intestinal flatulence and constipation.

10. Nerve sedatives are useful in many cases. Phenobarbital is a favorite sedative and hypnotic.

11. The use of Sulphocyanate (the potassium or sodium salts) in the treatment of hypertension will lower the blood pressure during administration; however, the average patient complains of weakness, prostration, dyspnoea, etc. This drug, like the vasodilators, lowers the pressure while being used, however, the patient feels more comfortable with an increased tension. Apparently we have no drugs which have a permanent and desirable effect on blood pressure.

12. The same is true of diathermy, liver extract, sulcitacium, etc.

13. Bleeding is the best remedy in certain cases of very high blood pressure with headache and vertigo. Lumbar puncture is indicated in convulsions, also in uraemia.

14. When salines, digitalis and diuretics fail to reduce edema, calcium salts are worthy of a trial.

15. The major excuse for presenting this paper is to bring about a better understanding in regard to diet in nephritis with hypertension. (Credit is acknowledged to authors for quotations used.)

370 E. TOWN ST.

REFERENCES

(1) Kidney Disease and High Blood Pressure: Allen—1925 (Manual).

(2) Clinical Significance of Abnormal Blood Pressures—International Clinics, Vol. III—38th series, Sept., Sir Humphrey Rolleston.

(3) Blood Pressure and Respiration—Journal A.M.A., April 6, 1929. Vol. 92, No. 14: Israel Rappaport.

(4) International Clinics, Vol. II, 35th Series—Sept. G. C. Dunham.

(5) Mdical Clinics of North America—July, 1920, and January, 1922: Epstein.

(6) The Use of Basic Diet in the Treatment of Nephritis. Section on Practice of Medicine—A.M.A., 1923: Sansum.

BOOKS RECEIVED

Psychology Normal and Abnormal. A general survey of the entire field of modern psychology. By J. W. Bridges, Professor of Psychology in the Faculty of Medicine of McGill University. D. Appleton and Company, New York and London.

Getting Well and Staying Well. A book for tuberculosis patients, public health nurses, and doctors. By John Potts, M.D., Fort Worth, Texas, with introduction by J. B. McKnight, M.D., Superintendent and Medical Director, Texas State Tuberculosis Sanatorium. Second Edition. The C. V. Mosby Company, St. Louis.

Symptoms of Visceral Disease. A study of the vegetative nervous system in its relationship to clinical medicine. By Francis Marion Pottenger, A.M., M.D., LL.D., F.A.C.P., Medical Director, Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, California. Fourth edition. With 87 text illustrations and ten color plates. The C. V. Mosby Company, St. Louis.

Spondylolisthesis

WALTER G. STERN, M.D., F.A.C.S., Cleveland, Ohio

IT is not the purpose of the writer to offer an exhaustive, detailed or meticulous report upon the deformity of slipping of the fifth, or at times the fourth lumbar vertebrae, which, once held to be a most rare and unfortunate complication of pregnancy, has been shown by our modern highly detailed and contrasty *X*-ray technique, to be not at all uncommon, and in addition, more prevalent in the male sex.

The frequency of its occurrence is in doubt, but in an examination of 900 able bodied young men who were radiographed before being employed by a railroad, this condition was discovered in three, which gives its occurrence as in one-third of one per cent of the male sex. Wilson of Los Angeles (Journal of Bone and Joint Surgery, April, 1927), says "a careful study of injuries to the low back has demonstrated the unsuspected frequency of spondylolisthesis". On the other hand, Herndon (Journal of Bone and Joint Surgery, April, 1927), did not note a single case in 941 consecutive back injuries taken from the files of the Illinois State Industrial Commission.

Were the spine a flexible column with its individual bodies standing firmly—one on top of the other—in an erect position, such a deformity as the one under consideration could not occur. Due, however, to the fact that the sacrum, which is the footing of this column, normally stands in a more or less horizontal position, the fifth and fourth lumbar vertebrae are directed forward and downward; in fact the entire angle between the horizontal inclination of the sacrum and the vertical position of the upper lumbar vertebrae is taken up in the forward arc of these vertebrae. These lower lumbar vertebrae are prevented from slipping downward and forward first, by the locking of the interarticular facets at the intervertebral articulations; second, by the binding power of the many powerful intervertebral ligaments; and third, the compressing, cohesive effect of the vertebral muscles—all three factors tending to hold the entire vertebral column together as an erect, substantial, elastic and mobile unit.

Whenever the hold of the hooking of the articular process one upon the other is broken, whether from trauma or disease; whenever the strength of the ligaments and muscles of the spinal column have been diminished from any cause whatsoever; whenever the strength of the union between the pedicle and the body has been lessened whether from trauma, disease or lack of fusion—then any abnormal forces applied upon the vertebral column from above, or upon the lumbo-sacral junction from behind, may tend either gradually or suddenly to disrupt the symmetry of the forward arch and a forward and downward slipping of the lower lumbar vertebrae, usually the fifth, may result. The slipping is usually directly forward and downward in the midline and the fifth lumbar vertebra is the one most commonly afflicted. More rarely, however, the fifth may remain anchored in place and the fourth vertebra be the one afflicted; or the forward slipping may occur at the upper angle of the sacrum and the sacrum slip forward upon the fifth lumbar vertebra,—a condition spoken of as reversed spondylolisthesis. The condition is usually bilateral, although various authors have described unilateral cases, and I have had one unilateral case in my own experience, combined with the presence of a congenital anomaly—a butterfly lateral process of the fifth lumbar vertebra which articulated with the sacrum. I shall only mention the possibility of a pre-spondylolisthesis, i.e., a decrease in the angle between the sacrum and lowest lumbar vertebra which has been put forward by Goldthwaite and others as a clinical entity and a frequent cause of backache. It is only fair to record that the pathological significance of such a condition has been denied by other writers.

The amount of dislocation may vary from the smallest conceivable amount to conditions so severe that the entire body of the fifth lumbar is below the level of the first sacral segment—one might say lying free in the cavity of the pelvis and situated posteriorly to the transverse level of the hip joints (Fig. 1. This patient presented no paralysis or especial neurological symptoms).

Numerous autopsy findings have disclosed the fact that the vast majority of these cases rest upon a congenital osseous deficiency basis, a lack of fusion between the bodies and the pedicle which allows mild trauma or long continued excessive weight bearing or other undue stresses to initiate the slipping of the vertebrae. (Fig. II.)

It is a well recognized fact that nowhere in the human body are there as many deviations from the normal anatomical structure as there exists in the lower lumbar and upper sacral segments of the vertebral column. This must be taken into consideration in any study of spondylolisthesis. A vertebra develops roughly from three general centers of ossification—one for the body, and one for either side of the "pedicle". The centers for neural arches fuse at the end of the second year, at which time the neural arch should be a complete unit and the two halves fused together at the spinous process. This fused "pedicle" and the center for the vertebral body do not fuse until

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the end of the third year. Abnormalities or irregularities in the complete fusion are not an unusual finding at autopsy or in radiographs of the spine taken for any purpose whatsoever, and must be considered as a very common occurrence.

This is, of course, of great sociological and medico-legal interest, as the evaluation of the presence of this deformity as the result of trauma often comes under consideration. On the one hand, one has a picture such as shown in the article of Bohart, J.A.M.A., March 2, 1929; also Cushway and Maier (Idem), that spondylolisthesis in young adults is not incompatible with perfect ability to follow a hazardous occupation and one that requires great strength and agility such as riding box cars down an incline at a rate of sixty miles an hour; and on the other hand, the condition may occur frankly as the result of bilateral fractures of the articulations or laminae. Between these two extremes lie all the stages and variations in the causative effect of congenital anomalies and trauma, and the surgeon must be guided as much by the resulting clinical manifestations as by the unchecked *X*-ray.

The writer has reviewed eighteen cases, seventeen in males, in which only two were frankly due to trauma. These traumae were severe and had led to other infractions of the spine or pelvis. A third was the subject of a compensation controversy, the claimant had overlifted and had experienced a sharp and sudden backache, but when examined six months later, located all his symptoms (which he claimed were most severe and disabling) in the region of the eleventh and twelfth ribs. He showed no limitation of motion or muscle spasm in the lower lumbar region. None of the cases were due to disease. Six showed some evidences of congenital anomalies in the lumbo-sacral region while the radiographs of one case (Fig. I.) very clearly showed a congenital lack of fusion of both laminae with the body of the fifth lumbar together with a bifid spinous process of the first sacral segment.

In the sixteen non-traumatic cases, thirteen presented symptoms of spinal insufficiency coming on gradually, usually after years of heavy work. Three were discovered accidentally through radiological examination of the spine for other causes.*

The clinical manifestations are those of low back pain, spinal insufficiency and disturbances along the course of the lumbo-sacral nerves. The buttocks appear flattened and square, the sacrum stands out very prominently, there is often a hollow or lordosis of the lower lumbar vertebra. The trunk appears shortened. The gait may be labored and waddly. Patients lose in strength, cannot perform the heavy work of former days; they may have more or less pain, rigidity and muscle spasm at the lumbo-sacral junction, and patches of paraesthesia and anesthesia, especially in areas about the femoral trochanters, is rather



Fig. 1—Forward slipping of fourth and fifth lumbar vertebrae.

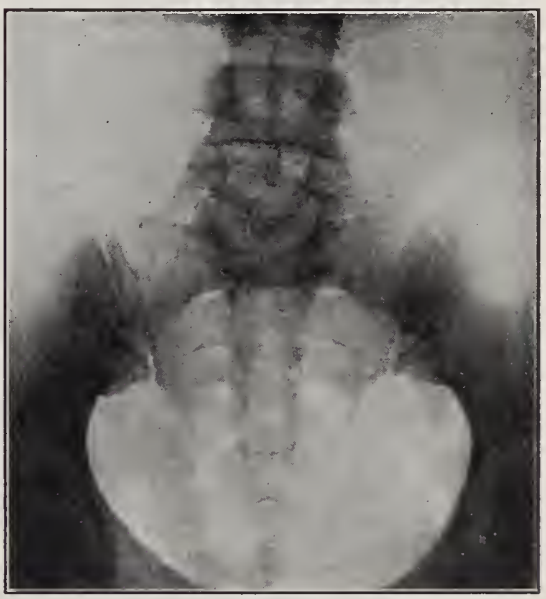


Fig. 2. Complete congenital dissociation of both laminae from the body of the fifth lumbar vertebra. Moderate forward slipping shown on lateral view. Pain coming on after mild injury to spine.

*Fourteen of these cases are from the writer's own practice, the radiographs and notes of four cases are from the experience of friends to whom the writer's indebtedness is herewith thankfully acknowledged.

common. Frank paralysis in the course of the nerves of the cauda equina is rarely noticed even with most extraordinary amounts of displacement. The case portrayed in Fig. 1 had no paralysis.

The location of the pain and symptoms is all important in evaluating the effect of trauma upon a case of spondylolisthesis complaining of injury and backache. If, as has been found in many cases, the *X*-ray discloses this deformity, but the patient complains of his pain in the lower dorsal or upper lumbar region and his nerve symptoms lie in other regions aside from that supplied by the lumbo-sacral group, then the accidental finding of this deformity can be ruled out of all causative effect upon the disability complained of.

The differential diagnosis must be made from tuberculosis, osteomyelitis, osteocarthritis, Kummel's Disease of lumbar vertebrae, primary or secondary malignancy, fracture, bilateral congenital dislocation of the hip and coxa vara. As before mentioned, proper *X*-rays will at once clear up the differential diagnosis, but as the technique is most difficult and the work inclined to be expensive, both the radiographer and surgeon are very often contented with inferior *X*-ray plates which are unfair both to the patient and to the principals in any possible dispute.

Most excellent, contrasty and detailed *X*-rays of this region are possible in all except the fattest individuals and should always be insisted on.

The treatment consists in a bone bridging operation by means of the fixation or grafting technique. A heavy and sufficient bone bridge is thrown over this area so that the weight of the upper lumbar vertebrae is borne directly by the sacrum, and this successfully restores the patient to an excellent degree of usefulness and marked freedom from symptoms.

1304 HANNA BUILDING.

Eye Changes Accompanying Hyperthyroidism

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EVERY one has had cases of exophthalmos due to toxic goiter. This sign of the goiter triad is not uncommon, and without going into too much detail, I will enumerate a few other common eye signs.

In the Cleveland Clinic up to the present time, in all cases of exophthalmos measured by the exophthalmometer, the exophthalmos has been present in both eyes. I have never seen a case of real unilateral exophthalmos due to goiter. Always in such cases, this condition has only appeared to be present because one palpebral fissure was more open than the other. The anteroposterior position of normal eyes varies between 14 and 18 mm.; the degree of exophthalmos has reached 36 mm.

A short time ago an article purporting to prove that the cause of exophthalmos is relaxation of the lids, stated that when the lids are closed the eyes are farther back in the socket. Actually, this is not so. The apparent recession is due to the physiologic fact that, on closing the lids, the eyes roll up, thus turning the corneas up and giving the appearance of recession. By actual measurement 2 to 3 mm. are added to the open measurement if the anterior corneal position is taken.

We do not know the cause of this troublesome condition, but can suggest some possibilities: (1) That it is not due to an increase in orbital fat has been proved. Further, it is illogical to assume that there would be an increase of fat here when there is a decrease throughout the body. (2) It is not due to relaxation of the lids. The orbital tissue is under pressure; that is, the anterior orbital fascia is pushed forward, the eyeball is compressed, and many of these patients have what I believe is a mechanical glaucoma, the intra-ocular tension often reaching 60 to 70 mm. (Schiotz). In several cases, this tension disappeared after thyroidectomy. (3) There is frequent and distressing paralysis or weakness of the muscles, due either to infiltration of muscle tissue or nerve tissue, causing a compression inactivity. What institutes this cycle is not known.

Next in frequency to the exophthalmos itself is the widening of the fissures. This is entirely unrelated to the exophthalmos, although present in the majority of such cases. Normally, the fissures measure 10 to 11 mm. Sometimes they may measure as high as 17 to 18 mm. In this instance, however, the disorder may be unilateral and unequal. There are cases of apparent ptosis which actually are only relative, the pseudoptosed lid being normal in position, and the opposite one retracted. I believe that the other lid signs are mechanical, difficulty of eversion (Gifford's sign) being due to the position of the eyeball against the tarsal cartilage, the lid lag (von Graefe's sign) being probably caused by a wide lid. Infrequency of winking and a fine tremor are more typical of goiter, in the former case the muscle acting only when necessary, and in the latter case the condition is caused by the extreme tension that all tissue is under in this disease.

Excess lacrimation is due to the overstimulation of the tear apparatus by the total exposure

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and consequent drying out of the cornea, and to the inability of the puncta to function because of faulty position.

Conjunctivitis accompanying exophthalmos is due to exposure since no pathogenic organisms have ever been isolated. Nystagmus is a rare feature.

As for the muscle changes, first, there is the common occurrence of weakness of accommodation convergence—the Möbius sign. The reason for this is that the internal recti muscles are more frequently weakened than are the external, resulting in exophoria or lateral muscle overaction more frequently than in esophoria. The upper lid or levator palpebrae (which is innervated by the third nerve) is frequently involved. (Here I might add that the orbicularis muscle has never been involved in our series, again indicating that the pathologic condition is in the orbit.) The superior recti are frequently paralyzed, or partly so, with a secondary spasm of the inferior oblique, producing distressing vertical palsies and head tilts. The external recti are also affected, making muscle involvement seem a rather common feature of toxic goiter.

Edema or bagginess of the lids is frequent. It may be unilateral or unequal, and is persistent even after surgery.

There are changes in the refractive apparatus, spasms of the muscles, and changes in the refractive index, all of which will be found to be of rather common occurrence if looked for, or if the patient is quizzed in regard to difficulty in reading, or the experience of dazzling sensations.

The fundus picture in our cases has not shown any pathologic condition of diagnostic significance. The arteries and veins are rarely so full as would be expected if the cause were stasis of venous outflow. Naturally, with a normal fundus the vision is rarely impaired except through increased errors of refraction. The visual fields have been normal in all cases examined.

The best treatment for progressive exophthalmos is surgery. The only cases of extreme protrusion that I have ever seen are those which have been treated medically for too long a period of time. I believe the patient is entitled to early operation, even in view of other risks, if there is a possibility of eyeball luxation out to the lids, in which case corneal ulcers due to exposure may occur.

The eye should be treated preoperatively to prevent lagophthalmos, using irrigation with a saturated solution of boric acid in the morning and a bland ointment at night in all cases in which there is a possibility that the lids may not approximate. Cold compresses are recommended for the edema, goggles to protect against the wind, tinted lenses because of the total exposure of the pupillary zone, and a solution of zinc sulphate gr. 1, with a dram of adrenalin chloride, 1 to 1,000 to an ounce of water for the conjunctivitis. These precautions will prevent the following consequences: extreme redness of the lids and eyes, lagophthalmic ulcers, and possibly loss of clear vision, since every ulcer, irrespective of size, leaves its scar and some corneal refractive change. For the ulcers, unless they are well advanced, it is not necessary to dilate the pupil with atropine. A bland ointment and an eye pad are sufficient, unless the lid is too wide open; if so, a Bullar shield is preferable. Sewing the lids together has not been satisfactory, for there is too much tension on the sutures. In those cases in which it would appear to be indicated, a Bullar shield works better and allows an already apprehensive patient to use the little vision he may have.

The only cases that have caused us extreme ocular difficulty were those in which it was necessary to delay surgery because of complete or nearly complete cardiac collapse or physical debility. Our last patient with extreme corneal ulceration died before operation could be done. Even in this case however the shield permitted the cornea to heal over without the destruction which is usually due to drying out and desquamation with secondary infection.

It should not be inferred that all cases of exophthalmos require surgery. In our series, however, the only cases in which operation was not done were those of anterior luxation with extreme ulceration. Postoperatively, the exophthalmos may improve, may remain stationary, or may progress; also, it may develop after surgery. The latter possibility, although rare, is extremely annoying.

Improvement is slow, and lasts for several years, but except in very early cases the symptoms do not disappear entirely. The widening of the fissures usually decreases rapidly, and the closing of the lids, staring, etc., often is completely corrected in spite of a persistent exophthalmos.

Corneal ulcers may be aggravated immediately after thyroidectomy, but they heal rapidly. Increased intra-ocular tension due to mechanical pressure disappears. The excessive glandular secretion persists after operation and necessitates the use of eserine or pilocarpine for a time. Peculiarly, this form of glaucoma does not produce any fundus or field change, probably because it is transitory.

The muscles offer the greatest difficulty. After recovery from the operation, the patient may find that he can use his eyes only for several hours, or perhaps he may learn that he has a diplopia which was unnoticed by him before operation because the other more disagreeable symptoms overshadowed it. Even though he is physically ready for work, his eyes will not stand the strain. The refraction may not be entirely correct. His

main trouble, however, is usually to be found in some group of muscles.

The headaches, nervousness, irritability, lack of stability occurring after thyroidectomy frequently can be traced to a faulty eye muscle, and if in a year or so following operation there is no improvement, an operation on the muscle should be performed.

CASE REPORT

A man, operated upon two years ago, now in perfect health, could not secure a position because of constant diplopia. An inferior oblique tenotomy, which required no hospitalization and only local anesthesia, has allowed this patient to resume his work.

CONCLUSIONS

(1) I believe that in a case of progressive exophthalmos associated with hyperthyroidism the operation should be performed as early as possible.

(2) The severe preoperative headaches accompanying exophthalmos may be due to a transitory glaucoma.

(3) Glasses should not be fitted for at least six months after thyroidectomy, and in all cases in which progress is slow, the eye muscle should be carefully checked for residual weakness or inertia.

CLEVELAND CLINIC.

Health Hazards in Use of Certain Solvents

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SOLVENTS of one form or another are a necessity in almost every industry. Among these solvents are found many substances which constitute health hazards for those working with them. Special attention should therefore be given to preventive measures when such solvents must be used.

Fortunately, the most universal solvent—water—is in itself quite harmless. Many watery solutions may be injurious to health, but if so, it is not because of the nature of the solvent. Next to water, alcohol is probably the most generally useful industrial solvent. Then comes a great variety of solvents used on account of special properties. For fats are used such substances as ether, carbon tetrachloride, chloroform and various hydrocarbons among the coal-tar and petroleum derivatives; for dissolving nitrocellulose, such substances as amyl, butyl and ethyl alcohols and acetates, acetone and a steadily increasing number of similar products; for gums and resins, turpentine and its substitutes, alcohol and often coal-tar derivatives like benzol; for rubber, acetone, carbon bisulphide, carbon tetrachloride, benzol or specially refined petroleum naptha.

The list of special solvents might be almost indefinitely increased, and it is receiving additions continually. For this reason it was evident very early in the preparation of material for the present paper, that no attempt could be made to go into details as to the specific effects on health of many solvents, but certain general considerations became more evidently important.

Study of the general subject of solvents brings out the following:

Comparatively few of the solvents now in quite general use have received very careful study relative to their possible effects on the health of those using them. Among these few are ethyl and methyl alcohol, ether, chloroform, carbon bisulphide, benzol, tetrachlorethane and perhaps some others.

There are many references to harmful effects on health due to use of many others, but carefully considered, it is hard to find any definite data on characteristic symptoms or body changes. Even so well known a solvent as turpentine has not received the attention one might expect considering the length of time in which it has been considered a possible health hazard.

Very commonly several solvents are used at once. This greatly increases the difficulty in determining effects on health due to any one of the combination. Moreover, still other factors enter in, not only the effects of the solvents, but of the substances entering into solutions must be considered, and there is another factor which will be fully appreciated by those of us who have had much to do with the handling of industrial patients, and that is the psychic. A new smell, a new procedure, a new symptom related or not to the work, and presto! one may see a dozen workers all presenting "symptoms due to the work."

Certain features appear in relation to almost the whole group of solvents. The first has to do with the method of absorption. By far the greater proportion of solvents are volatile substances under almost all conditions. The most important method of absorption is therefore through the respiratory system, by inhaling the vapors or fumes or spray containing the solvent. Contact with the skin also occurs almost necessarily, so that in some instances absorption may be by this route. In certain instances it may be possible that small amounts are absorbed through the gastro-intestinal tract, but this is probably a negligible source of trouble. The chief method of absorption is almost universally by inhalation, and this gives the keynote for preventive measures. Consideration must be given to such ques-

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tions as weight of the vapor as compared with air, direction of flow of vapors or spray as influenced by temperature of solutions, presence of air currents, etc.

The second general feature is the nature of the effects on the body. These, as might be expected from the method of absorption, are chiefly systemic. Such local effects as are shown by most solvents are relatively slight, and consist largely in some degree of irritation, but essentially in a lowering of the natural protective properties of the skin and mucous membrane. The skin may become dry and chap or crack, so that it becomes much more easily subject to injury and infection. This is even more noticeable in the case of the mucous membrane. Much of the dermatitis charged to the handling of solvents I believe is very frequently due to other substances than the solvents themselves. The systemic effects due to the inhalation of fumes or spray of solvents show a certain degree of similarity, though some have very characteristic features as will be mentioned later. The general symptoms common to many solvents are in order of incidence,—headache, loss of appetite, nausea and vomiting, dizziness, shortness of breath, lassitude, and either nervous irritability and excitation or the reverse, drowsiness, sometimes even to stupor.

Besides the above general symptoms the following special effects seem well established with the solvents named:

Methyl or wood alcohol—selective action on nervous system, especially optic nerve, causing blindness.

Benzol—profound, sometimes fatal anemia.

Carbon bisulphide—general physical and mental deterioration, poly-neuritis, insanity, etc.

Turpentine—inflammation and degeneration of tissue in kidneys and urinary tract.

Tetrachlorethane—toxic jaundice.

Reference might be made here to the special effects produced by some of the more generally used solvents:

Alcohol—Ethyl alcohol as generally used may be considered free from serious harm. It seldom produces symptoms unless the fumes are excessive as in its use in confined spaces. Even then the symptoms are seldom serious or long lasting, but attention must be given to the denaturing substances present in industrial ethyl alcohol. Sometimes as much as 20 per cent of methyl alcohol is used and causes serious trouble. Sometimes even the 0.5 per cent of benzol used in another formula might be a source of trouble. Pyridin bases are also added which when used may result in serious skin irritation.

Methyl alcohol differs decidedly from ethyl in its effects. Through various methods employed by wood alcohol manufacturers in this country, it became the principal form of industrial alcohol in use for many years, and even now it is often considered the alcohol of choice. There seems to be no real chemical or production reason for this, and the health hazards connected with it are so great that there would seem no excuse for its continued use. It is one of the solvents which may cause serious poisoning by absorption through the skin as well as by inhaling its fumes. The action develops slower than with ethyl, but is far more lasting and profound. It is cumulative and has caused blindness and even death from chronic absorption of quantities too small to produce any immediate symptoms. It is more volatile than grain alcohol and hence absorption is greater than with grain alcohol in the same processes. Some claim that the dangers of wood alcohol are only in the use of the crude and that the purified methyl is harmless, but experience has shown that there is slight if any real difference in toxicity.

Other alcohols, as amyl, benzyl, butyl, propyl and isopropyl alcohol are coming into use of late as solvents in lacquer making. They possess certain properties in different boiling points, time for evaporation, etc., which has determined their use, though their solvent properties differ but little, if any, from those of ethyl. In most instances their smell is far more unpleasant. There is little definite information as to their relative toxicity, as very little study has been given this point. They are almost always used in combination with so many other substances that observations as to symptoms from the use of lacquers containing them, gives us little of value.

Two quite generally used solvents might be mentioned: acetone and amyl acetate, the so-called "banana oil", from its smell. Apparently no careful study has been made of the full effects of these substances, even though they have often been classed as industrial poisons. Continued observation of those exposed to these solvents has led to the conclusion that though some irritation and transient symptoms result, they are not the cause of serious ill health. Their bad reputation appears to have been due largely to their strong odor, and the fact that they were often used with other really toxic substances like wood alcohol or benzol, which were the true offenders.

Carbon tetrachloride is a solvent coming into more general use, especially so where it is essential to use something free from fire hazard. It is often considered quite harmless, and is, as compared with benzol, for instance, but it must be remembered that it closely resembles chloroform in its effect on the body. Slight exposures seem to give rise to considerable complaint of headache and especially nausea and loss of appetite. Where the fumes are greater, excitability and even a condition resembling the carbon bisulphide or "naptha jag" may be noted, followed by depression or stupor. It has anesthetic properties like chloroform, but is more treacherous, even so that

there have been some deaths recorded from exposures sometimes not considered extreme. The first of these reported was following the use of carbon tetrachloride as a shampoo, in which the patient went quite suddenly into coma with death shortly after.

The subject of benzol has been very ably handled in another paper before this section, so will not be repeated here, but there are some other coal-tar derivatives often mentioned in connection with benzol as substitutes free from its hazards. These are toluol, xylol and "solvent naphtha". Though apparently non-toxic as compared with benzol, this is relative only, for these substances are definitely toxic. Toluol and xylol are both less volatile and so usually breathed in less concentrated fumes. In quantities usually required they are less toxic, but concentrations must be increased with caution. They cannot be freely substituted for benzol as a relief from the hazards of benzol because far smaller quantities are produced, so that they could not be obtained in the quantities in which benzol is available.

With the increasing use of spray methods of painting and varnishing and the rapidly widening field for the use of lacquers, a constantly increasing group of solvents is coming into use. Benzol was the first to be recognized as distinctly hazardous and has received very thorough study. Attention is now being directed more and more to others of this group and this is a field which should receive special study by industrial hygienists. All that may be done at this time is to mention a few of the substances in this group, and urge that care be used to guard against ill health which might result from exposure to some. These are the amyl, butyl, and ethyl alcohols, their acetates, ethyl propionate, butyrate, lactate and benzoate, diethyl carbonate, and oxalate, isopropyl and benzyl alcohols, and probably many others.

PREVENTIVE MEASURES

These are of several kinds which may be briefly summarized as follows:

General

(1) As accurate information as available on the effect on health of the solvents concerned.

(2) Selection of healthy workers. In this connection it should be noted that women and boys are apparently more susceptible to exposure than adult males.

(3) Close supervision of workers, not only from the production point of view, but with special reference to health and use of safeguards provided. This supervision should, in case of known hazards, include physical re-examination, and in any case examination of any workers showing definite ill health, or continued complaint of certain symptoms.

(4) Whenever possible use harmless or less toxic solvents in place of those of known toxicity.

Special

(1) Remember that respirators are no protection from average fumes or vapors and as far as volatile constituents are concerned, no protection from sprays. Gas masks are usually entirely impractical.

(2) Prevent all unnecessary exposure by reducing to a minimum areas of evaporation from containers, leaks, splashes in handling. Provide proper containers and means for handling which will reduce to a minimum skin contacts or wetting of clothing. Remember that even when the exposure is too slight to cause immediate ill-effects, that continued exposure to lower concentrations in many instances results in serious illness.

(3) Enclosed systems, covered tanks or vessels, automatic or mechanical handling of parts immersed, instead of hand dipping, use of brushes or swabs with handles in place of wet cloths held in the hand for wiping operations.

(4) Thorough ventilation of working places. This means:—

(a) Ample room ventilation.
(b) Forced ventilation of confined spaces.
(c) Providing of local exhaust systems wherever these can be installed to control escape of fumes at their source.
(d) Attention to arrangement of fume collecting systems, booths, etc., to see that they meet conditions due to relative weight of vapors, direction of air currents and position of operators.

SUMMARY

The use of solvents in industry is almost universal. The number in use is steadily increasing due to special needs. Many solvents are a health hazard to those using them, unless definite precautions are taken to prevent absorption.

Only a few substances in this class have been very thoroughly studied. Many observations which have been made are misleading because so often various solvents are used in combination, and symptoms observed may have been due to one or more of the solvents, or to the substances in solution.

Nearly all solvents which are decidedly volatile, are absorbed through the respiratory system, and their most important symptoms are systemic, showing chiefly in the nervous and circulatory systems.

To reduce the health hazards due to use of solvents, no solvent of known toxicity should be used if it is possible to substitute a harmless or less toxic substance. All unnecessary exposure to fumes or sprays, or skin contact with solutions should be avoided. Covered apparatus, enclosed systems, thorough general and local ventilation, as indicated, should be used. Wherever known toxic solvents are used so that workers must be exposed, medical supervision by examination and re-examination is advisable.

Careful study should be made of the substances in this group which are coming into general use, and strict observation made of the effects reported as occurring among those exposed, in order to determine which substances may be the safest.

Essentials for Health

HOWARD JONES, M.D., Circleville, Ohio

THERE is a species of animal which, in its natural state, lives with nearly equal perfection of physical form in the climate of the cold northland, the warm southland and the temperate areas between. It lives with fine development at the level of the sea where there is excessive cloudiness and fog and at high altitudes in an atmosphere of dryness and sunshine. In one place this species exists almost exclusively on fish and other animal food, in another on fruits, vegetables, berries and nuts with little or no animal protein. In still another climate it lives on cereals and fruits, or cereals, fruits, vegetables and animal food indiscriminately as each may happen to be more or less plentiful. Under all these variations the skin, nerves, muscles, bones and teeth are all well and evenly developed, and life in one environment is about equal in longevity to that in any other, thus proving that the balance between alkalosis and acidosis is well maintained regardless of any particular climate or any particular food.

We, who are seeking for the proper quantity of the best ration which will establish and keep the metabolic balance, which will secure the finest development of skeleton, muscle, nerve, skin and all the organs under it, may well stop and consider the intimate habits of this animal which preserves its physical health under all the different conditions of heat or cold, low altitude or high altitude, dryness or moisture, sunshine or cloud and various forms of food. We may well stop and inquire what the common factor is of these numerous environments under which this Homo sapiens lives and thrives in such uniform perfection. Does the fact imply that this animal has an easy adaptability to its environment?

It must be admitted that in his present state of civilization man lacks something which his primitive brothers had in common, or that he now fails as he never did before, in his natural state, to adapt himself to his surroundings. The draft for the world war showed that about 30 per cent of the young men examined could not pass the military requirements for soldiering. This surely was an uncanny exposition of the physical imperfections of our youths. Unless I am misinformed by history, or am too optimistically interpreting the reports of the physical condition of the young men of one hundred or more years ago, our forebears were a much sturdier type of the genus Homo than we are today.

The Abstract of Publication Number Two, of "The Committee on the Cost of Medical Care", states that the most serious disability among laboring men and women in the United States is the common cold, (a disability from which North American Indians did not suffer). It says special estimates place the number of persons in the United States mentally defective at nearly one million, and the number of school children wholly or partly deaf at three millions. Among these school children and pre-school children examined in six different surveys from 65 per cent to 95 per cent have one or more defects. In some of the groups over 60 per cent of the children had defective teeth. 95 per cent were found to have some degree of hyperopia, myopia or astigmatism. The author of the publication states that these defects with others of childhood not named forecast more serious defects in adult life, and he adds: "Although it is highly important that children possess good health during their formative years, this foreboding of physical impairment in later life is perhaps a still more significant aspect of the defects of childhood." Our future inferiority as adults promises, from the above survey, to surpass the present. Undoubtedly many of our defects begin in childhood and are carried along life with an increasing increment. We are rightly placing much importance upon a sufficient, balanced ration beginning at birth, but there are some other factors which must be given a place of equal importance which we are now overlooking.

As essential as is the balanced ration throughout our lives the best nutritional results cannot be attained unless there is proper elimination. If the waste products of the chemical factory within us are not properly disposed of or our balanced ration is not properly metabolized, our cells cannot remain healthy, and, directly or indirectly, from the want of proper functioning of various organs of our body many disqualifying infirmities arise to plague us. The number of calories of food required for a given person is known to depend upon the energy performed, and the amount of elimination should vary in proportion. To eat even the best balanced ration, if the amount is in excess of the energy expended, would be the opposite of the right way to gain or preserve health. Exercise helps eliminate, but exercise alone is not sufficient. There must be in addition a stimulation of the various glands and cells of the body by fresh air, by exposure of a large surface of the skin to skylight and sunshine and the changing atmospheric conditions.

There was a common factor in the living habits of the aborigines of our country, and it exists with all people who live in a state of nature, to which we give too little heed. Their clothing was such that air, sunshine and all atmospheric conditions were registered by the skin. Nakedness was universal in warm climates. Exercise was required over and above that obtained by hunting, gardening, games, tanning hides, making clothes,

cooking and other domestic occupations. This was obtained by the religious, civil and social dances. By means of these exercises, which to us are so grotesque, nearly every muscle of the body was brought into use. Often they were prolonged to test endurance, but usually they were not exhausting. The result of these dances was a body supple and fit. Another factor in common among our Indians was leisure—time to sit around and joke—for our Indians were a very jovial people. Our civilization balks at the factors which were the common habits of our natives. Our waking hours are largely spent in the house, in over-heated and stuffy rooms, and we sleep in rooms with inadequate or no ventilation. The majority of citizens have little to take them out of doors in all weather and they wear clothing of a fashion that will not allow air and sunshine or sky-shine to touch a large part of the skin, the function of which in preserving the balance which we call health is too little understood. The present dress of the women is a vast improvement for health over any styles which have gone before. It is deplorable that the men still cover their bodies almost entirely with clothing which is all too impervious to the free circulation of air against the skin. They wrap themselves up as if they were mummies or larvae in their cocoons waiting for their resurrection.

Since the prevailing styles for women's clothes have come into general use, there has been a vast improvement in their health, for now the skin gets more air and sunshine than before. In a furnace where heat units are desired, it would avail little for economy to shovel into the fire-box just the proper quantity of the best quality of coal, if the ashes were left to accumulate in the grate-bars and the air draft up the chimney were not attended to. This simile is incomplete, but it will serve to illustrate the fact that the most excellent balanced ration in proper amount will not produce health in man unless there is proper metabolism, and this is accomplished best by sufficient exercise in the open air with sufficient skin surface exposed to the elements.

De Soto, Coronado, Alvar Nunez Cabez De-Vacca, La Salle, Champlain and the Jesuit Fathers in New France as well as the English explorers in the 17th and 18th centuries, who came in contact with our native Indians before they were contaminated by the white man, all testified that the Indians were a hardy race of people living under very diverse conditions of food and climate. If instead of word pictures of these very physically perfect people we need real pictures, they can be found in the admirable drawings of John Wyth, 1585. The artist Catlin also made many drawings during his three thousand miles of travel among forty-eight different tribes uninfluenced by contact with the white man. It seems unnecessary to quote many authorities in regard to the perfection of body and mind of our American Indians. The literature pertaining to the subject is full of confirmatory statements. Catlin says their bones were smaller than those of the white race although as tall, they carried no useless flesh, their teeth were generally regular and sound and wonderfully preserved to old age. The women were exceedingly healthy and robust and gave easy birth and strong constitutions to their children, which in a measure may account for the simplicity and fewness of their diseases. The children had few diseases and these were usually so mild they seldom caused death. The babies were generally nursed two and three and sometimes four years.

Catlin makes a comparison which I quote in full: "I will allude to the hundreds of men whom I have seen and travelled with, who have been several years together in the Rocky Mountains in the employment of the fur companies where they have lived exactly upon the Indian's system, continually exposed to the open air and weather, and to all the disappointments and privations to that mode of life; and I am bound to say, that I never saw a more hearty race of men in my life, whilst they remain in the country; nor any who fell to pieces quicker when they get back to confined and dissipated life which they easily fall into when they return to their own country".

The evidence is easily sufficient to establish the premise that whatever the latitude or longitude and however diverse the food the Indians had good health, this means they had a balanced ration with similar habits of life. This ration was not only exceedingly varied but it was obtained from the animal and vegetable kingdoms in changing proportions according to environment and season, and was eaten with irregularity, sometimes a feast and other times a famine.

Nothing has been said about the mental attainments of our aborigines. It is certain they were not dullards. Benjamin Franklin said the Indian chiefs were the equal in diplomacy to any European statesman. And Sir William Johnson, many years the British Indian agent, said they were an intelligent and logical people. One need but read their speeches made at the numerous council meetings with the Europeans to discover that their minds were alert and logical concerning the things about which they had knowledge. Their arguments with the Jesuit Fathers show they were good in philosophy and metaphysics.

After admitting the necessity of a balanced ration, which was obtained by the Aborigines anywhere within the limits of the present United States, the secret of their fine physical and mental health seems to resolve itself into their life in the open air with suitable exercise, little clothing and mental and physical leisure. It may be contended that in our present state of civilization and economic slavery the chief things of this common factor in the life of primitive people cannot be acquired by the majority of us. Probably

not in its perfection, but we can recognize the living conditions necessary for robust health and approach them as nearly as possible. Many people are able to afford the leisure to take advantage of every requirement, and some show a determination to do so, but the great mass of our citizens pay little heed to the plain elemental principles of health.

It may justly be asked, if the Indians of North America were such fine primitive people, so perfect physically and so well endowed mentally, why they had not made farther progress toward a better civilization. They had been on this continent several thousand years, had advanced to a democratic form of government, and, according to the Jesuit Fathers, had a code of morals which put to shame the French inhabitants along the St. Lawrence River in New France. They were probably as far along the road to a higher civilization as our ancestors were when Tacitus described them. There were several factors which held them back, the principal ones being the absence of horses and cows. They had domesticated the wolf and substituted him for the dog, that ever faithful companion of the pioneer, but no animals existed which could supply the place of the horse and cow. All travel had to be on foot or by canoe until the advent of the Spaniard provided the horse. The Indians were quick to take advantage of the use of this animal, and finally it became the unit of value of their wealth. If the Romans, who were the most cultured people of the age, had given all the art and science of the day to the Indians as they did to our ancestors, and then left them to their own development, their story would be different.

The President's Page

A Personal Communication to the Membership from

ALBERT H. FREIBERG, M.D., Cincinnati

To every thinking person it will be apparent that in the medical profession, as in all other callings, men will be found whose personal characteristics and whose attitude toward their own work differ quite as widely as possible. Since no tests of idealism, of social conscience, of ethical conceptions are required in admission to the study of medicine and since it is highly likely that such tests would be found utterly futile in any case, it is not to be expected that men will reach one high standard of character by the time of their graduation. It is true that contact with teachers whose lives are eloquent of noble purpose and a devotion to studies whose ultimate object is to enable men to relieve suffering, to shorten disability and to prolong life, should have an elevating effect upon the characters of their students. In fact, I am persuaded that no man can go through the experience of education in a medical school of high type without being definitely influenced toward aspirations for service to human kind quite apart from any thought of the effect of the professional training upon his personal fortune. This opinion of the effect of medical training, with its opportunities for observing the diverse health misfortunes of people as well as the means of preventing them and relieving them, is held, even though subconsciously, by the majority of persons. Is not this at the bottom of the esteem in which our profession has been held throughout the generations of men?

To those whose hearts have thus been softened by experience with those who suffer there is surely no chapter with that degree of melancholy and unhappy interest as is implied when we speak of malignant neoplasms of whatever kind; what is generally spoken of as cancer. While there is a general belief amongst medical men that chronic irritation is a potent cause for the diseases which are comprehended in the name "cancer", this is by no means plainly evident. While it is believed that nearly all of the conditions which this word implies are, in their beginnings at least, of local character and capable of being completely removed from the body, it is also realized that the period during which they remain so essentially local may be exceedingly brief. So short may this period be, in fact, that it may, only too often, have come to a close when the discovery of disease has been made. Every physician of experience is also fully aware of the fact that malignant diseases are apt, in their very early stages, to produce symptoms of very indefinite kind; very often there are no symptoms to attract notice from the patient. Just so, on the other hand, many of the causes for a cancer scare are the symptoms of disease which is of benign nature. The physician himself is nowise exempt from malignant disease and he is perhaps more prone than the lay patient to neglect attention to symptoms which are not of alarming character, just as he is more likely to be frightened by such as are of a significance less dire even though subjectively more apt to terrify.

That the death toll from malignant disease has been steadily on the increase is well known to

every medical man. According to the most reliable statistics which are available, it has risen from 63.0 per 100,000, in the year 1900, to 91.9, in 1924. This means an increase during this period of 45.9 per cent; an increase of very significant amount, even though we grant that the figures are not entirely reliable. In no case is it possible for the variation of these figures from the exact truth to justify our considering the situation with regard to cancer as less than a major problem for our profession or other than a challenge to our interest in its solution. This is true of it both in terms of prevention and the conservation of life in those who have become involved.

To those who read this *Journal* it is unnecessary to say that no subject in medicine is receiving more attention and devoted study than the essential nature and cause of the different kinds of malignant disease, or unhappily, that we do not appear to be at the threshold of such discovery as will provide us with a truly rational method of treatment other than that of radical surgery at a time when it may be hoped to accomplish the complete removal of all of the elements of the growth from the body. Nevertheless, notwithstanding the fact that this whole matter has been the subject of constant agitation within the medical profession for some years, there is reason to believe that there is a failure to realize the real terms and nature of the cancer problem on the part of many of our professional colleagues at the present time. This appears to be true even of those living in the great medical centers of the country. If this is so it is likely to be true of those less favorably situated in respect of the dissemination of professional knowledge and the discussion of clinical experience.

Speaking of the experience of St. Luke's Hospital in New York, recently, Dr. Francis Carter Wood said: "We come down to the melancholy fact that in a modern, highly civilized community, coming to a hospital which offers every facility for diagnosis and treatment, probably not over 5 per cent of the cancer cases that applied to that institution lived five years; in other words, the period which we ordinarily set as being willing to call it a cure." As the result of a study made in Massachusetts to ascertain the reasons for delay in the diagnosis and treatment of cancer cases, a number of significant findings were made. During a period of thirty-three months, 1252 individuals with cancer and 4083 individuals without cancer attended the State-aided cancer clinics. The median interval of delay between first symptom and first consultation with a physician for individuals with cancer was 6.5 months and for individuals without cancer, 6.3 months. Thinking the condition to be a minor malady was the largest single cause of delay. However, forty-five per cent of the cancer patients had a median delay of six months after consulting a physician. The greatest single cause for this delay is attributed to poor advice on the part of the attending physician. It is further stated that the median interval of delay is increasing each year since the first figures in 1927. These statements have been obtained from the "Campaign Notes of the American Society for the Control of Cancer." They are rather convincing evidence that wider and more definite information on this very important subject is required not only for the lay public but for our own profession as well.

It is the object of these words to enhance a sympathetic attitude on the part of the medical profession toward the efforts which the American Society for the Control of Cancer and the agencies allied with it are making. There would appear to be reason for believing that there are still not a few physicians who have not yet become sufficiently influenced by what it is striving to accomplish. Indifference to the work which is being done in this field with a consequent failure to inform one's self and take part in the instruction of the laity constitutes a menace to the continuing good reputation of our profession and it signifies equally on the part of the individual thus guilty a failure of duty toward his patients and himself.

Defective vision is one of the most frequent causes for failure of applicants for naval aviation training to qualify, according to a statement made recently by Lieutenant Commander John R. Poppen, chief of the aviation medical division of the Department of the Navy. This defect, he said, is one of the foremost reasons also why naval aviators who have received training and have had experience are disqualified. Of 2203 reports which showed the reasons for disqualification, more than 50 per cent reported ocular defects, Lieutenant Commander Poppen stated.

Ohio is paying compensation to workmen injured in industrial accidents with an overhead of 4½ cents for every dollar paid out, E. I. Evans, chief actuary for the State Industrial Commission, has reported to Will T. Blake, chief of the State Department of Industrial Relations. This figure is the lowest of any state in the United States, Mr. Evans stated, pointing out that other states operating on a plan similar to that of Ohio are spending around 10 cents for every dollar paid out, and that several states operating on different plans are spending as high as 60 cents on the dollar. Mr. Evans also reported compensation totaling $16,650,548.98 was paid out by the Commission during the year 1929, a 17 per cent increase over 1928 when a total of $14,235,-964.11 was paid out. In 1929, 16 per cent more claims were filed than in the preceding 12 months, but the number of compensable claims showed a 10 per cent increase.

Columbus
May 13, 14, 15,
1930

Eighty-fourth Annual Meeting
Ohio State Medical Association

Columbus
May 13, 14, 15,
1930

Neil House, Directly Opposite State Capitol

GENERAL SESSIONS

Opening Session

Tuesday, May 13, 9:30 A. M.

Meeting Place—Main Ball Room, Northwest Corner, Mezzanine Floor

This session is combined with the first session of the House of Delegates. See next column.

Annual Dinner

(SECOND SESSION)

Tuesday, May 13, 7:00 P. M.

Meeting Place—Main Ball Room, North end of Mezzanine Floor

1. Address of the President, Albert H. Freiberg, Cincinnati.
2. Address of the President-Elect, C. W. Waggoner, Toledo.
3. Informal reception in honor of the President and President-Elect.

Motion Pictures

1:30 P. M. Wednesday, May 14, Main Ball Room, Northwest Section Mezzanine Floor.

1. Rabies.
2. Simple Goiter.
3. Benign Prostatic Hypertrophy.

Third Session

Wednesday, May 14, 3:30 P. M.

Meeting Place—Main Ball Room, North end of Mezzanine Floor

1. THE RESULTS OF SYMPATHETIC GANGLIONECTOMY AND RAMISECTOMY IN THE TREATMENT OF CHRONIC ARTHRITIS—by L. G. Rowntree, Rochester, Minn.

   Bilateral sympathetic ganglionectomy and ramisectomy in a series of patients with chronic arthritis. Several cervico-dorsal sympathectomies for disease in upper extremities. Lumbar sympathetics removed for relief in the lower extremities. Peripheral changes. Most marked and prompt relief of pain usually occurs in the feet and ankles, with slightly less relief in the knees later. Arthritis of the spine and hips not noticeably affected.

   Impressive results to date. The operation has been particularly successful in rather young individuals with arthritis of the peri-articular type, showing disturbance of vaso-motor activity. Some results have been obtained in patients with bony changes, but they are not so striking or so consistent as in the peri-articular type of case.

2. FADS AND FANCIES OF OBSTETRICS AND GYNECOLOGY, AND THEIR COST—by John Osborn Polak, Brooklyn, N. Y.

Fourth Session

Wednesday, May 14, 8:00 P. M.

Meeting Place—Ball Room, North end of Mezzanine Floor

1. MEDICINE—PROFESSION OR BUSINESS?—by L. L. Bigelow, Columbus.

   Insistence that business is the dominant characteristic of the age. Factors making for concentration of power and authority. Disappearance of multiple individual enterprizes. Suppression of individualism in business. Ideals of the new schools of business administration. Sanctions of the new "social conscience". Application of these ideas to medicine. Is business to become a profession and medicine to become a business? Can the technology of business be applied to medicine? What is hoped for and what may be expected from the application of the philosophy of "big" business to the practice of medicine? Attempts to answer these questions. Expression for consideration of a personal point of view.

2. MEDICAL PROBLEMS AND EDUCATION—by Willard C. Rappleye, Director of Study, Commission on Medical Education, New Haven, Conn.

   Economics and defects of present forms of medical care, actual and relative. The load of medical care, unavoidable and preventable. Professional problems involved in the "job" of providing adequate care. The relationships of the medical student, intern, practitioner and specialist. The purposes, methods and scope of the basic training.

Fifth Session

Thursday, May 15, 9:00 A. M.

Meeting Place—Main Ball Room, including Sections A and B., Northwest and North Central Section of Mezzanine Floor

General Meeting under the Joint Auspices of the Medical and Surgical Sections.

(See page 330)

OPENING SESSION AND HOUSE OF DELEGATES

First Session

Tuesday, May 13, 9:30 A. M.

Meeting Place—Main Ball Room, Northwest Corner, Mezzanine Floor

In the chair, R. B. Drury, President of the Columbus Academy of Medicine.

Presentation of the President, Albert H. Freiberg

House of Delegates Order of Procedure

1. *Call to order by the President.*
2. *Roll Call.*
3. *Consideration of Minutes of Previous Meeting* (Published in *The Journal*, June, 1929).
4. *Reports of Officers.* (Reports submitted below, published in full in the May, 1930, *Journal).*
   (a) Treasurer's Report combined with report of Committee on Auditing and Appropriations.
   (b) Reports of Councilors as to the condition of of the societies in their respective districts.
5. *Reports of Standing Committees:*
   (a) Public Policy—J. H. J. Upham, Columbus, Chairman.
   (b) Publication — Andrews Rogers, Columbus, Chairman.
   (c) Medical Defense—J. E. Tuckerman, Cleveland, Chairman.
   (d) Medical Economics—J. Craig Bowman, Upper Sandusky, Chairman.
   (e) Medical Education and Hospitals—Ben R. McClellan, Xenia, Chairman.
   (f) Auditing and Appropriations—S. J. Goodman, Columbus, Chairman.

6. *Reports of Special Committees:*
   (a) Mental Hygiene—T. A. Ratliff, Cincinnati, Chairman.
   (b) Periodic Health Examinations, V. C. Rowland, Cleveland, Chairman.
   (c) Military—H. H. Snively, Columbus, Chairman.
7. *Appointment of Committees:*
   (a) A committee on the addresses of the President and President-Elect.
   (b) A Committee on Resolutions.
   (c) A Committee on Annual Reports.
   (d) A Committee on Credentials of Delegates.
   (e) A Committee of Tellers and Judges of Election.
8. *Nomination and Election of Nominating Committee:*
   (Nominations from the floor with one representative on the committee to be elected from each councilor district. This committee shall report to the Second Session on Wednesday afternoon, its recommendations in the form of a ticket, containing nominees for constitutional offices as required under the constitution. The President will issue instructions to the committee on the constitutional requirements).
9. *Introduction of Resolutions.*
   It is necessary that all resolutions introduced in the House of Delegates be referred to the Reference Committee on Resolutions and reported back to the House before action can be taken. All resolutions for consideration at this annual meeting must be introduced at this session and reported back to the House by the Reference Committee at the Wednesday afternoon session. All resolutions must be typewritten and submitted in duplicate.
10. *Action on Proposed Amendments to the Constitution and By-Laws.*
    (Published in *The Journal*, pages 235 to 249, inclusive of the March, 1930, issue). Presentation of the proposals by Dr. Freiberg, chairman of the Committee on Revision. All amendments introduced from the floor to the proposed amendments must be in writing (preferably typewritten).
11. *Miscellaneous Business.*

HOUSE OF DELEGATES

Second Session

Wednesday, May 14, 1:30 P. M.

Meeting Place—West Central Section of General Ball Room Space, Sections A & B, North End, Mezzanine Floor.

1. *Roll Call.*
2. *Report of Nominating Committee.*
3. *Annual Election.*
   (a) President-elect. (One year).
   (b) Election of Members of Council.
   Members of Council are elected for two-year terms, those representing odd numbered districts expiring in even numbered years. To be elected.
   Councilor, First District—Present incumbent, John A. Caldwell, Cincinnati.
   Councilor, Third District—Present incumbent, O. P. Klotz, Findlay.
   Councilor, Fifth District—Present incumbent, C. L. Cummer, Cleveland.
   Councilor, Seventh District—Present incumbent, E. B. Shanley, New Philadelphia.
   Councilor, Ninth District—Present incumbent, I. P. Seiler, Piketon.
   (c) Election of Delegates and Alternates to the American Medical Association.
   Four delegates and their respective alternates, (two years each).
   Those whose terms expire at this time are:
   Wells Teachnor, Sr., Columbus.
   D. H. Morgan, Akron, (alternate).
   Ben R. McClellan, Xenia.
   A. C. Messenger, Xenia, (alternate).
   E. R. Brush, Zanesville.
   H. S. Noble, St. Marys, (alternate).
   Geo. Edw. Follansbee, Cleveland.
   C. L. Cummer, Cleveland, (alternate).

   (The By-Laws of the American Medical Association provide: A member of the House of Delegates must have been a member of the American Medical Association and a Fellow of the Scientific Assembly for at least two years next preceding the session of the House of Delegates at which he is to serve. Delegates and Alternates from constituent associations entitled to more than one representative shall elect them so that one-half, as near as may be, shall be elected each year.)
4. *Reports of Reference Committees:*
   (a) Committee on Addresses of President and President-elect.
   (b) Committee on Annual Reports.
   (c) Committee on Resolutions.
5. *Selection of Place for Annual Meeting in 1931.*
6. *Miscellaneous Business.*
7. *Installation of Officers for 1930-1931.*
8. *Confirmation by House of Delegates of Committee Appointments announced by the newly-installed President.*
   (a) One Member of the Committee on Public Policy (Three years). (Member whose term expires, John B. Alcorn, Columbus.)
   (b) One Member of the Publication Committee (Three years). (Member whose term expires, A. B. Denison, Cleveland.)
   (c) One Member of the Committee on Medical Defense (Three years). (Member whose term expires, W. H. Snyder, Toledo.)
   (d) One member of the Committee on Medical Education and Hospitals (Three years). (Member whose term expires, C. E. Kiely, Cincinnati.)
   (e) One Member of the Committee on Medical Economics (Three years). (Member whose term expires, J. Craig Bowman, Upper Sandusky.)
9. *Unfinished Business.*
10. *Final Adjournment of House of Delegates.*

Announcement

Immediately following adjournment of the House of Delegates, Council meets for reorganization. The newly installed president becomes chairman of Council and Council selects a secretary.

MEDICAL SECTION

A. B. BROWER, Dayton ..... Chairman
LEO C. BEAN, Gallipolis ..... Secretary

First Session

Tuesday, May 13, 2:00 P. M.

Meeting Place—West Central Section of Ball Room, Sections A and B; North end, Mezzanine Floor

1. NON-SPECIFIC PROTEIN THERAPY IN PEPTIC ULCER—by Leon Schiff, and Robert J. Norris, Cincinnati.
   The series includes twenty-six or more cases of chiefly duodenal ulcer, studied during the past year on the medical service of the Cincinnati General Hospital. Aolan injections (10 cc. twice weekly for an average of five weeks) were given into the buttocks. In eighteen cases there occurred marked improvement, in three slight improvement, and in five no benefit. A fractional gastric analysis was done before and after treatment. Further general analysis of the cases will be included.
   Discussion—C. A. Mills, and C. C. Fihe, Cincinnati.
2. AUTONOMIC IMBALANCE AND HYPERTHYROIDISM—by L. A. Levison, Toledo.
   Autonomic imbalance term used to designate disturbance of function of autonomic nervous system. Research and study have advanced our knowledge of the anatomy and physiology of the sympathetic nerve mechanism. Nomenclature and classification of disturbances of the nervous system, more particularly of the autonomic division, confused and uncertain. Advances in the physiology and anatomy of this nerve system have added materially to the understanding of the clinical picture.
   Marked similarity between the syndrome of autonomic imbalance and that of hyperthyroidism. Important to make a distinction, because the results of operation, in instances of autonomic imbalance, do not give the promised results. Most important step in making the clinical differentiation is the understanding that there is such a clinical entity, even

though it is not absolutely clear in all its phases. Case reports.

Discussion—John Dudley Dunham, Columbus, and W. C. Stoner, Cleveland.

3. UNDULANT FEVER: A CLINICOPATHOLOGICAL STUDY OF NINETY CASES OCCURRING IN AND ABOUT DAYTON, OHIO—by Walter M. Simpson, Dayton.

Recent medical literature and evidence as to the distribution of undulant fever. Data have been collected on over 1.000 cases, majority of which have been recognized during the past three years. Disease is invariably found widely prevalent when an earnest effort is made to learn its incidence in a given locality. Ninety confirmed cases of undulant fever, in and about Dayton, studied during past two years. Laboratory studies. The clinical features of the disease have not been emphasized in published work. Undulant fever presents sufficiently well-defined clinical picture to lead to an initial clinical diagnosis of undulant fever in over one-third of our cases. Emphasis on the clinical manifestations of the disease. No evidence of direct caprine or porcine origin. Relationship between ingestion of raw milk containing Brucella abortus and the development of undulant fever in human beings was established in several of our cases.

Discussion—Mr. Leo F. Ey, Columbus, and L. G. Bowers, Dayton.

4. CLINICAL AND PATHOLOGICAL OBSERVATIONS ON HYPERTENSION—by R. Wesley Scott, Cleveland.

Paper based on clinical studies and pathological findings in a series of over 200 autopsied cases of hypertension seen at the Cleveland City Hospital during the past ten years. This study shows that the majority of patients with so-called essential hypertension present the clinical picture of myocardial insufficiency and ultimately die of circulatory failure. A much smaller number die of a cerebral accident, while a few cases succumb to kidney insufficiency. The clinical course and therapeutic management of this group of patients are discussed in the light of the post mortem findings.

Discussion—Wm. H. Bunn, Youngstown, and H. V. Paryzek, Cleveland.

Second Session

Wednesday, May 14, 9:00 A. M.

Meeting Place—West Central Section of Ball Room, Sections A and B, North end, Mezzanine Floor

5. TRANSITORY TYPE OF DIABETES—by Henry J. John, Cleveland.

Sharp differentiation of diabetes in its borderline aspect extremely difficult. Alimentary hyperglycemia of longer standing, either with or without glycosuria, interpreted correctly as diabetes mellitus. Difficulty arises in the interpretation of a transitory type of hyperglycemia, with or without glycosuria. Here we begin to deal with the individual viewpoint of the observer. Final proof for or against such a diagnosis can be gleaned only from a prolonged observation of such patients over a period of years, on restricted and unrestricted diet. We may have cases of diabetes in which hyperglycemia and glycosuria are due to a slight damage to the pancreas which may be compensated for and disappear in comparatively short time. (Cases illustrating such conditions).

Discussion—Chester D. Christie, and H. V. Paryzek, Cleveland.

6. DIABETES MELLITUS, COMPLICATIONS AND ASSOCIATED CONDITIONS—by Chas. W. McGavran, Columbus.

The carefully trained diabetic today should live out his expectancy. Acidosis should be promptly met with and coma prevented. Infection lowers the individual's ability to produce Insulin. Important diet factors. Coma preventable. Neccssity of frequent examinations of urine and blood sugar with the administration of fluids and glucose, cardiac stimulation, lavage, and enemas. Surgical intervention for gangrene.

Arterio sclerosis complications. Its prevention by careful dietary, and if necessary, Insulin regime. References to acute appendix, gall bladder, strangulated hernia, obstruction, or other complications or conditions requiring surgical intervention. Tuberculosis in diabetics. By use of Insulin, a dietary regime suitable for over nourishing the tuberculous patient can be carried out. Nephritis a most serious complication, and prognosis very grave.

Discussion—J. J. Coons, Columbus, and Chas. A. LaMont, Canton.

7. ACCIDENTS AND SEQUELAE IN THE INTRAVENOUS USE OF ARSENICALS—by C. L. Cummer, Cleveland.

Arsphenamines used by constantly increasing number of physicians in the treatment of syphilis. Vincent's angina, and other conditions. Thus knowledge of possible accidents and unfavorable sequelae becomes important. These may be classified as follows: I. Those occurring at the time of injection. II. Those appearing after a lapse of several hours or days.

The first group includes (1) mechanical or technical difficulties, such as the injection of fluid into the surrounding tissues instead of into the lumen of the vein, (2) nausea, vomiting, or other gastro-intestinal symptoms, (3) urticaria, sneezing, etc. (4) "nitritoid crises".

The second group includes (1) Herxheimer reactions, (2) gastro-intestinal symptoms, (3) hemorrhagic encephalitis, (4) skin reactions. The latter are of especial importance, ranging from slight erythema to generalized exfoliative dermatitis. These will be considered in detail and appropriate measures for prevention and treatment will be considered.

Discussion—C. G. LaRocco, Cleveland, and H. J. Parkhurst, Toledo.

8. THE DIFFERENTIAL DIAGNOSIS BETWEEN CARDIAC DISEASE AND ABDOMINAL CONDITIONS—by W. W. Beauchamp, Lima.

Increased incidence of cardiac disease emphasizes importance of diagnosis. Classification of acute and chronic, as an aid to differential diagnosis. Coronary artery disease. a. Thrombosis with cardiac infarction. b. Sclerosis with or without angiospasm. History of two cases. Myocardial insufficiency. Chronic myocarditis. a. Congestion. b. Edema. History of two cases. Sudden changes in cardiac mechanism. a. Paroxysmal auricular fribulation. b. Heart block.

Summary of the usual symptoms of the above cardiac diseases. Summary of the unusual or abdominal symptoms of the above cardiac diseases. Differential diagnosis of the different cardiac diseases. Differential diagnosis between cardiac disease and abdominal conditions—review of differential points. Bibliography of recent literature.

Discussion—Edward B. Pedlow, Lima, and C. J. Straehley, Cincinnati.

SURGICAL SECTION

RALPH G. CAROTHERS, Cincinnati ..... Chairman
FRED M. DOUGLASS, Toledo ..... Secretary

First Session

Tuesday, May 13, 2:00 P. M.

Meeting Place—Main Ball Room, Northwest Corner, Mezzanine Floor

1. SURGICAL END RESULTS OF HYPERTHYROIDISM—by M. E. Blahd, Cleveland.

1. Comparatively speaking thyroidectomy gives better results than other methods. No method, however, restores patient to one hundred per cent normalcy.
2. Following operation, a six month rest period is essential.
3. A safe rule is to remove just a little more gland than one thinks justifiable.
4. Foci of infection should be eradicated subsequent to the thyroidectomy, rather than before.
5. Unremoved foci of infection are often responsible for persistent hyperthyroidism.
6. If thyroidectomy is done before degeneration of vital organs has taken place, the patient becomes a good insurance risk.

Discussion—Harry G. Sloan, Cleveland, and Robert C. Austin, Dayton.

2. INCIDENCE AND MORTALITY OF INTESTINAL OBSTRUCTION—by E. J. McCormick, Toledo.

Brief review of the subject, classification, recent experimental data, diagnosis and treatment. Evaluation of statistics gathered from Ohio, Indiana and Michigan with comment on the incidence and mor-

tality of Ileus. Discussion of ways and means to improvement in this field of surgery. Lantern Slides.

Discussion—Dudley Palmer, Cincinnati, and E. C. Brush, Zanesville.

3. SURGICAL PROCEDURES IN PULMONARY TUBERCULOSIS—by Carl Steinke, and C. L. Hyde, Akron.

The types of cases in which phrenicotomy, thoracoplasty and pneumolysis are indicated will be described. The operative technique, the results and the complications will be discussed. Lantern slides will be shown.

Discussion—Samuel O. Freedlander, Cleveland, and George J. Heuer, Cincinnati.

4. NEPHROPEXY—by Parke G. Smith, Cincinnati.

A study of the anatomical and physiological changes that accompany an altered renal mobility, with a review of the basic mechanical factors that become operative as the mobility of the kidney varies from the normal. A review of the results obtained in a personal series of sixty-six consecutive cases, and an explanation of a simplified surgical technic developed during the course of this series.

Discussion—Franklin C. Beeks, Portsmouth, and Hugh Baldwin, Columbus.

Second Session

Wednesday, May 14, 9:00 A. M.

Meeting Place—Main Ball Room, Northwest Corner, Mezzanine Floor

5. SURGERY OF CERTAIN TYPES OF ARTHRITIS—by Burt G. Chollett, Toledo.

The importance of surgery in arthritis is increasing. Its role varies in different forms of joint disease, including tuberculous, gonorrheal, luetic, and the chronic atrophic and hypertrophic arthritides. 1. Surgical search for etiology and differential diagnosis in certain types. 2. Pain relief by surgery in special groups of cases. 3. Prevention and correction of deformity in other types. 4. Remodeling or reforming of joints in still other instances. Lantern slides.

Discussion—Rudolph S. Reich, Cleveland, and Robert Cofield, Cincinnati.

6. THE SURGICAL TREATMENT OF COLITIS——by E. R. Arn, Dayton.

This paper is concerned with a discussion of the various types of colitis, with particular reference to etiology, differential diagnosis, radiographic characteristics, and the medical treatment. Special consideration is given to the indications for surgical treatment in those cases in which medical treatment has failed.

Discussion—Mark Millikin, Hamilton, and John V. Hartman, Findlay.

7. CHOICE OF ANESTHETICS WITH PARTICULAR RELATION TO THE PROTECTION OF THE PATIENT—by Hugh Cabot, Ann Arbor, Michigan.

Anesthesia too commonly thought of as a method of protecting the patient only against physical insult and chiefly pain. This was, of course, the earlier view and that for which anesthetics were first introduced. Today, protection of the patient from emotional insult is almost as important and this should be taken into account in the selection of each anesthetic. Obviously local, block, spinal and sacral anesthesia will not fulfill this qualification which until very recently, is reserved for inhalation methods which produce both insensibility to pain and unconsciousness. Methods previously employed by the use of morphine and scopolamine have not entirely fulfilled the requirements. An estimate of the various anesthetics now in use will be made and an opinion as to their availability will be expressed.

Discussion——E. I. McKesson, Toledo, and Moses Salzer, Cincinnati.

8. THE INFLUENCE OF THE THYROID, THE ADRENALS AND THE NERVOUS SYSTEM ON THE PRODUCTION OF PEPTIC ULCER—by George W. Crile, Cleveland.

Peptic ulcer appears, from experimental evidence, to be produced by hyperacidity and hypermotility, resulting in increased potential and electrolysis, and controlled by the nervous system and the adrenal and thyroid glands. The logical treatment, by which symptoms were eliminated in five cases, is partial thyroidectomy and unilateral adrenalectomy.

Discussion—Andre Crotti, Columbus, and A. J. Beams, Cleveland.

JOINT MEDICAL AND SURGICAL

A. B. BROWER, Chairman.....Medical Section
RALPH G. CAROTHERS, Chairman..Surgical Section

Thursday, May 15, 9:00 A. M.

Meeting Place—Main Ball Room, including Sections A and B, Northwest and North Central Section of Mezzanine Floor

1. AN APPRAISAL OF THE THERAPEUTIC MEASURES USED IN THE TREATMENT OF THE ANEMIAS—by Cyrus C. Sturgis, Ann Arbor, Mich.

Various therapeutic agents commonly used in the different types of anemia, including, among others, arsenic, blood transfusions, splenectomy, diet, liver, stomach, kidney and iron. Relation of focal infection to the anemias will be considered. Treatment of the anemias, such as pernicious anemia, the many different types of secondary anemia, anemia of myxoedema, anemia of pregnancy, chronic hemolytic anemia and others will be considered. Illustrative case histories will be presented, showing the effect of the various types of treatment.

2. THE REASONS FOR THE TREATMENT ADVOCATED IN CERTAIN FRACTURES—by Chas. L. Scudder, Boston, Mass.

OBSTETRICS AND PEDIATRICS

S. H. ASHMUN, Dayton.....Chairman
L. E. LEAVENWORTH, Canton.....Secretary

First Session

Tuesday, May 13, 2:00 P. M.

Meeting Place—Junior Ball Room, Northeast Corner of Mezzanine Floor

1. INFANTILE ECZEMA: AN ANALYSIS OF CASES EMPHASIZING THE IMPORTANCE OF EARLY SUPERVISION AND TREATMENT—by D. C. Mebane, Toledo.

Whether there is no allergic factor or whether this factor is slight or severe, excellent results may be obtained in most cases where the pediatrist has control of the diet and hygiene of the infant from the beginning.

Discussion—C. L. Ruggles, Cleveland, and B. S. Dunham, Toledo.

2. RENAL RICKETS—by A. Graeme Mitchell, and George M. Guest, Cincinnati.

The occurrence of chronic interstitial nephritis in children is greater than might be supposed. Many such cases are referred to in the English literature, but only occasionally in the medical literature of other countries. Our own experience embraces several cases of chronic interstitial nephritis in children in one of which there was well marked rickets. The clinical and roentgenologic and chemical studies of this patient will be summarized and remarks will be made upon renal rickets, renal infantilism and chronic interstitial nephritis.

Discussion—Henry G. Gerstenberger, Cleveland, and C. C. Payne, Dayton.

3. PYURIA IN INFANCY AND EARLY CHILDHOOD AS INFLUENCED BY CONGENITAL UROLOGICAL MALFORMATIONS—by C. A. Coleman, Dayton.

Congenital malformations in the urinary tract are relatively frequent in infancy and early childhood. Urinary stasis is the natural result of the majority of such anomalies and this is favorable to the development of infection. The milder type of infec-

tion clears up readily by internal medication. In cases of persistent pyuria, an early and complete urological study is indicated. No child is too young to undergo such an examination. Hesitancy on the part of some pediatricians in permitting their patients to be subjected to such an examination, is oft-times far reaching—as irreparable kidney damage may result if the abnormalities are not recognized and corrected. Lantern slide demonstrations.

Discussion—Samuel Edelman, Columbus, and J. V. Greenebaum, Cincinnati.

4. INTRANASAL AND AURAL INFECTIONS IN CHILDREN—by Hugh G. Beatty, Columbus.
   1. Source and avenue of infection.
   2. Common and uncommon symptoms.
   3. Prognosis.
   4. Complications.
   5. Treatment.

Discussion—Arthur Helmick, Columbus, and Arthur Wm. Thomas, Youngstown.

Second Session

Wednesday, May 14, 9:00 A. M.

Meeting Place—Junior Ball Room, Northeast Corner of Mezzanine Floor

5. THE UTERINE CERVIX DURING LABOR—by John Gardiner, Toledo.
   The uterine cervix during labor is a chief concern of the obstetrician, for injury is fraught with grave consequences to the mother not only immediately but later may be the cause of her death of cervical cancer. The condition of the cervix is discussed, when there is a disproportion, a dry labor and a delay in dilatation due to a cord complication.

   Discussion—J. K. Hoerner, Dayton, and J. G. Smailes, Coshocton.

6. THE ELIMINATION OF THE SECOND STAGE OF LABOR IN BREECH PRESENTATION—by A. H. Dunham, Dayton.
   History of breech cases. Difficulties encountered. Morbidity and mortality of mother and child. Efforts to secure safer and happier results in obstetrics. Lesson Potter bas taught. Use of Ethelen gas. An ideal obstetric anesthetic. Method of extraction. After care. End results.

   Discussion—S. J. Goodman, Columbus, and A. J. Skeel, Cleveland.

7. FORCEPS—by Wayne Brehm, Columbus.
   The uses and abuses of forceps in the various types of labor. The influence of forceps on the length of labor. Their influence on perineal lacerations, injuries to the fetus, episiotomies, relaxation of the perineum. The proper application, amount of traction necessary, and the influence upon the relief of pain during labor.

   Discussion—W. D. Fullerton, Cleveland, and Roy Krigbaum, Columbus.

8. THE THYROID IN PREGNANCY—by J. L. Reycraft, Cleveland.
   A brief resume of the medical literature on this subject together with observations made on series of pregnant and non-pregnant women. A simple classification of thyroid enlargements accompanying pregnancy. Prophylactic and other treatment.

   Discussion—Wm. D. Inglis, Columbus, and W. R. Barney, Cleveland.

EYE, EAR, NOSE AND THROAT

HARRY B. HARRIS, Dayton ..... Chairman
ALBERT BROWN, Cincinnati ..... Secretary

First Session

Tuesday, May 13, 2:00 P. M.

Meeting Place—Sections C and D, Ball Room, East Central Section, North end of Mezzanine Floor

SYMPOSIUM OF GLAUCOMA

1. THE TREATMENT OF GLAUCOMA WITHOUT OPERATION—by W. H. Snyder, Toledo.
   Glaucoma as a symptom complex rather than a distinct entity. More than one disease but having the same terminal event. Place for treatment with therapy and drugs outside of surgical operation. Especially true of the chronic and subacute types. Problem should be worked upon by internists and physiologists. As yet, we do not know exactly what condition precedes the affection and whether the increased tension is the result or the cause of the difficulty. Problems of colloidal chemistry and physiological secretion are of great importance in determining etiology of the disease. All cases should not be treated by drugs alone and, therefore, it is wise in any symposium to present the care and treatment of this disease from every angle.

   Discussion—S. H. Monson, Cleveland, and Paul G. Moore, Cleveland.

2. ADVANTAGES OF EXTERNAL SCLERAL SCALPEL INCISION IN THE IRIDECTOMY FOR ACUTE GLAUCOMA—by Clarence King, Cincinnati.
   Consideration of the difficulties of scleral incision in acute glaucoma. Scleral incision from the outside in contrast with that made by the keratome and the usual incision from the inside with the Graefe knife. Description of technique of the external scalpel incision.

   Discussion—W. A. Stoutenborough, and Andrew Timberman, Columbus.

3. PATHOLOGICAL CONSIDERATIONS IN GLAUCOMA—by Albert D. Frost, Columbus.
   Etiological factors. Confusion of cause and effect because of microscopic examinations of advanced cases only. Early changes studied by loupe, slit lamp, gonio scope, etc.
   Changes that favor production of glaucoma:—
   1. Blocking of filtration angle by changes in lens, ciliary body and vitreous.
   2. Structural change in angle.
   3. Changes in aqueous.
   Changes produced as a result of tension in various ocular structures.

   Discussion—A. D. Ruedemann, Cleveland.

Second Session

Wednesday, May 14, 9:00 A. M.

Meeting Place—Sections C and D, Ball Room, East Central Section, North end of Mezzanine Floor

5. CHRONIC SUPPURATING EARS—by George M. Coates, Philadelphia, Pa.
   Brief description of etiology, mode of invasion, causes of chronicity, with reference to prophylaxis. Classification of middle ear pathology calling for different types and methods of treatment with the end results in untreated or unsatisfactorily treated cases as well as the function to be expected in those where the disease has been arrested. General considerations of treatment. Selection of proper treatment in order of sequence from conservative to radical and what may be expected from each and otherwise, including protein therapy and the principles underlying the selection of treatment for any given case.

6. THE REDUCTION OF RECENT NASAL FRACTURES. ILLUSTRATED BY LANTERN SLIDES—by Myron Metzenbaum, Cleveland.
   1. Fractures to both nasal bones in their lower half with depression and displacement of the fractured portions of the nasal bones. 2. Fractures along the base lines of the nose with the bases of the nasal portions of the maxillary bones spreading outward.
   Fractures within the nasal cavities—1. The bony septum is depressed with fractures along the perpendicular plates of the ethmoid and vomer. 2. The triangular cartilage is fractured at the junction of the perpendicular plate of the ethmoid and vomer. 3. The triangular cartilage is dislocated (a) from the groove in the vomer, (b) from underneath the nasal tip, (c) from its position in the columella. 4. The cartilage is usually bent or buckled. 5. The mucous membrane may be torn along any of the lines of fracture or dislocation.
   Reduction—Methods described.

   Discussion—George C. Schaeffer, Columbus, and Wm. Mithoefer, Cincinnati.

7. WHAT CONSTITUTES CONSERVATISM IN PLURAL INFECTIONS OF NASAL ACCESSORY CAVITIES—by John Edwin Brown, Columbus.

Treatment and surgery in infection or disease of a single nasal accessory cavity (sinus) is greatly complicated in cases involving more than one sinus and in pan-sinusitis. In many of these cases, adherence to simpler forms of treatment and limited surgical measures fail in giving patient relief—not to say cure. Some of these call for radical measures, which in their end results shorten the term of the disease and give better assurance of health than could be obtained in any other way.

Discussion—John A. Lukens, Toledo, and G. W. Stimson, Warren.

8. A CORRECTION OF NASAL DEFORMITIES—WITH CASE REPORTS—by Edward King, Cincinnati.

History of plastic surgery with some observations on the present trend. Technic of the various procedures for correcting nasal deformities, including hump nose, elongated nose, fractures, and depressed nasal bridge. Cases showing the various deformities before and after correction will be illustrated with lantern slides.

Discussion—George C. Schaeffer, Columbus, and Myron Metzenbaum, Cleveland.

NERVOUS AND MENTAL DISEASES

WILLIAM H. PRITCHARD, Columbus.....Chairman
LOUIS J. KARNOSH, Cleveland.....Secretary

First Session

Tuesday, May 13, 2:00 P. M.

Meeting Place—Red Room, Southwest Corner, Mezzanine Floor

1. PRINCIPLES UNDERLYING THE TREATMENT OF MUSCULAR ATROPHY—by Herman Campbell Stevens, Cleveland.

The evidence adduced in favor of the trophic influence of motor nerves on muscles and other tissues is reviewed and found to be inadequate. The physiologic changes in muscle consequent upon nerve section are summarized and methods of treatment are described.

Discussion—Julius M. Rogoff, Cleveland, and C. E. Shinkle, Cincinnati.

2. BRACHIAL PLEXUS PALSY—by John H. Nichols, Cleveland.

A discussion of the clinical aspects of partial and complete palsies due to injury of the brachial plexus in adults. Birth palsies are not included. Three cases are reported—two of which are complicated by Horner's Syndrome. Unusual trophic disturbances are discussed. Lantern slide demonstrations present the sensory derangements which are likely to occur in this type of nerve injury. A working differentiation between the more strictly radicular form of brachial palsy and a lesion involving the distal portions is presented from the standpoint of symptomatology and prognosis.

Discussion—Louis J. Karnosh, Cleveland, and John D. O'Brien, Canton.

3. THE ALBUMIN RELATION IN SPINAL FLUID—by Louis A. Miller, Toledo.

The qualitative and quantitative estimation of spinal fluid globulin. The Wirchbrodt and Braun and Husler quantitative methods. The Ammonium Sulphate method. Kafka's quantitative method. The hydration coefficient. The Nissl Method of estimating albumin as modified by Kafka. The albumin quotient as obtained by comparison with the quantity of globulin.

Discussion—Theodore Zbinden, Toledo, and J. F. Bateman, Cincinnati.

4. PROGRESSIVE FACIAL HEMIATROPHY—by Franklin C. Wagenhals, Columbus.

A disease characterized by a progressive wasting of one side of the face. The process begins during youth. The left side is most frequently attacked. All of the structures of the side of the face may be involved. It may be complicated with other diseases of the nervous system. The upper cervical sympathetic has been suggested as the site of the pathology. The diagnosis is not difficult. There is no specific treatment.

Discussion—Charles E. Kiely, Cincinnati, and Charles W. Stone, Cleveland.

Second Session

Wednesday, May 14, 9:00 A. M.

Meeting Place—Red Room, Southwest Corner, Mezzanine Floor

5. THE DIAGNOSIS OF BRAIN TUMOR, BRAIN ABSCESS AND ENCEPHALITIS—by H. D. McIntyre, Cincinnati.

The differential diagnosis of brain tumor, brain abscess and encephalitis is at times difficult, especially if a history of trauma or previous infection is not obtained in brain abscess, or if choked disc be present in encephalitis without febrile symptoms. A number of cases are reported, in which the diagnosis presented difficulties, together with autopsy reports and operative findings. Lantern slides.

Discussion—Louis J. Karnosh, Cleveland, and Ernest Scott, Columbus.

6. CHANGE IN THE COURSE OF GENERAL PARALYSIS OF THE INSANE UNDER MALARIAL THERAPY—by Lorne W. Yule, Cleveland.

A remission of symptoms is found to occur in a much greater percentage of cases than has been found following any other form of treatment. A change in the question of prognosis is introduced. Some authorities regard malarial therapy as being a specific treatment and general paralysis therefore should no longer be considered as being a permanent disability. A summary of results as found in treated cases after a lapse of over five years from the time of the administration of treatment suggests, however, that there appears to be an arrest in the progress of the disease rather than a complete cure.

Discussion—E. L. Hooper, Dayton, and C. H. Creed, Columbus.

7. WHAT IS A NORMAL CHILD MENTALLY?—by Emerson A. North, Cincinnati.

Influences other than poor physical health such as deformities or organic changes that might very decidedly influence mental health, and other than such mental states as seen in the feeble-minded, the psychopathic and defective child are considered. It shall be the purpose to point out the ways in which a child may fail in certain instances to make proper adjustments because of certain environmental circumstances and situations, yet remain in the range of mental normality. "A normal child mentally is the child who has normal native intelligence, who has lived in an environment in which he has been understood, and has understood himself, in which he has had opportunities to develop his mental interests and activities, in which the emotional forces have been properly balanced, with the formation of correct attitudes toward life and toward work".

Discussion—Henry C. Schumacher, Cleveland, and Edson J. Emerick, Columbus.

8. MEDICAL OPINION AND JUSTICE—by George T. Harding, Jr., Columbus, and Barton Walter, Attorney, Circleville.

A medical view. Essential to society that justice be based upon all facts related to a case in court. Understanding afforded by progressive medicine should not be withheld. How can this knowledge be made plain to the court Legal procedures that help.

Discussion—Guy H. Williams, Cleveland, and J. H. Berry, Athens.

PUBLIC HEALTH AND INDUSTRIAL MEDICINE

A. G. CRANCH, Cleveland.....Chairman
H. J. POWELL, Bowling Green.....Secretary

First Session

Tuesday, May 13, 2:00 P. M.

Meeting Place—Colonial Room, South Central Section, Mezzanine Floor

1. HEALTH HAZARDS IN CHROMIUM PLATING—by L. J. Blair, Cleveland.

Use of chromium and its compounds in the plating industry has brought about new exposures. "Chromium Poisoning" not a new problem, nor a serious menace; not a constitutional disease, only local in

its action; not in itself disabling or leading to permanent disability or illness. Appearance of "chrome sores". Perforation of Septum. Other symptoms. With recognition of the hazard, prevention and treatment should be easy.

Prevention: Proper equipment and protection for the men. Treatment: Promptness in attention to small abrasions, etc.

Discussion—Donald M. Glover, and Geo. F. Sykes, Cleveland.

2. THE EFFICACY OF THE PASTEUR TREATMENT—by L. W. Childs, Cleveland.
   (a) Deaths from rabies in Cleveland since 1906.
   (b) Preventive measures since 1906.
   (c) Types of injuries.
   (d) Causes of death after treatment.
   (e) Complications occurring during treatment.
   (f) Types of anti-rabic Vaccine used and recommended.

   Discussion—Harry L. Rockwood, and Roy Leslie, D.V.M., Cleveland.

3. CUTTING OIL DERMATITIS—by G. F. Sykes, Cleveland.
   1. What is cutting oil?
   2. Where, when and how is it used in industry?
   3. What pathological conditions arise from its use?
   4. Symptoms, signs and differential diagnosis of the diseases.
   5. The economic aspects of the condition with relation to disability and benefits under the Workmen's Compensation Law.

   Discussion—H. N. Cole, and A. G. Cranch, Cleveland.

4. WHY INDUSTRY NEEDS A STANDARD FOR MEASURING THE PHYSICAL CONDITION OF ITS WORKERS—by M. E. Fulk, Philo.

   Influence of occupation upon the health of workers. Search for a standard whereby we can measure and classify the physical condition of industrial workers. Confusion in terminology on "condition of health" with "physical condition". Suggested classification of measuring physical condition and determining functional capacity by which the findings may be articulated and compared, against which later better systems of measurement may be more accurately judged with a view of finally adopting a standard: 1st class, 95-100 per cent, within the bounds of normalcy; 2nd class, 80-95 per cent, impairments but no disability; 3rd class, 60-80 per cent, beginning disability; 4th class, 40-60 per cent, moderate amount of disability; 5th class 0-40 per cent, marked amount of disability.

   Measurement for the physical condition of the American worker will give him a thorough physical examination, and by the rating of each and every one of the bodily organs to the function it subserves, it is possible to arrive at the worker's total physical classification.

   Discussion—Carey P. McCord, Cincinnati, and Emery R. Hayhurst, Columbus.

Second Session

Wednesday, May 14, 9:00 A. M.

Meeting Place—Colonial Room, South Central Section, Mezzanine Floor

5. THE NEW PUBLIC HEALTH AND THE PHYSICIAN—by John Sundwall, Ann Arbor, Mich.

   The physician's important role in the new public health, which opens up many interests and activities whereby the services of the physician are going to be utilized more than ever before. This should result in an increase of income to the physician. One of the important functions of our medical schools is to acquaint students in training with the needs of society along the lines of health so that the student, when he goes out, will be able to appreciate the needs of and render fuller service to it. Both society and the physician will be mutually benefited as a result of this new appreciation and understanding.

   Discussion—D. J. Slosser, Defiance, and J. A. Muenzer, Toledo.

6. THE DIAGNOSIS AND CONTROL OF UNDULANT FEVER—by Paul Frederick Orr, Perrysburg.

   A discussion of the clinical signs and symptoms of Undulant (Malta) Fever, with case history reports, from the standpoint of the practicing physician and health officer in the recognition of this disease.

   Methods of prevention and control will be discussed based on epidemiological studies of several years duration.

   Discussion—John Lavan, Toledo, and W. H. Peters, Cincinnati.

7. INDUSTRIAL ACCIDENTS—by Paul A. Davis, Akron.

   What does industry do for its accidents. Classification of industrial accidents. General methods of treating minor and major accidents. Fractures—classification. Cost of treatment of accident cases. Compensation and compensatory cases. Methods of decreasing accidents. Safety first program.

   Discussion—H. R. Conn, Akron, and R. P. Albaugh, Cleveland.

8. HEALTH EDUCATION AND THE PHYSICIAN—by Clayton C. Kohl, Ph.D., Bowling Green.

   The wide variation in both the individual and environmental factors makes the practical problem of health a very technical and difficult science and an art of the highest order. Health education must include at least five major aspects: (1) Parents, actual and prospective, must be taught the elementary principles of raising children. (2) Youth, in the period of school and college training, should be given sound scientific knowledge of hygiene and physiology. (3) All of those who serve the public in any major health function should have special training for their work. (4) All of those who pursue these callings should be required to study the social and pedagogical aspects of their respective sciences. (5) All men and women after entrance upon business or professional life, as a corollary to aspects three and four, should have easily available to them sound information through books, magazines, lectures, and the like on the vital problems of health living.

   The American Medical Association today has a definite social policy of health education that commands the admiration of every thoughtful man and woman, and yet the great body of physicians take little interest in putting it into effect.

   Discussion—Emery R. Hayhurst, Columbus, and C. D. Barrett, Oberlin.

Eastern Standard Time

The time indicated on this program is Eastern Standard time.

Essayists—Discussants

"All papers read before this Association shall be its property. Each paper shall be deposited with the secretary (of the section) when read. Authors shall not cause papers read before this Association to be published as original elsewhere, nor until after they have been published in the official *Journal* of the Association." Chapter III, Section 4, By-Laws.

Discussants of papers are requested to forward typewritten copies of their remarks to *The Ohio State Medical Journal*, 131 East State Street, Columbus, Ohio, not later than two weeks after the Annual Meeting in order that they may be published with the papers.

SPECIAL CONVENTION FEATURES

Special attention is called to the general sessions, including the meetings of the House of Delegates, the Annual Dinner on Tuesday evening, to be followed by the addresses of the President and President-Elect, and the Wednesday afternoon program, in addition to the general session on Wednesday evening and Thursday morning and the splendid section programs.

ORGANIZATION LUNCHEON
Wednesday, May 14, 1930
President Freiberg, Presiding

On Wednesday noon, May 14, at the Neil House, will be held the usual Organization Luncheon. Presidents, secretaries, treasurers, legislative and medical defense committeemen of county societies and academies of medicine, and state officers and district councilors will be guests of the Association at this luncheon. The program will consist of a brief address by Dr. C. W. Waggoner, Toledo, president-elect of the Association; a talk on legislation by Dr. J. H. J. Upham, Columbus, chairman of the Committee on Public Policy; and a discussion of medical defense problems by Dr. J. E. Tuckerman, Cleveland, chairman of the Committee on Medical Defense. Admission by special card.

REGISTRATION

General registration for all members and guests will be conducted on the Mezzanine Floor, Neil House, the convention headquarters. Admission to all section and general meetings will be by badge only. *Everyone in attendance must register.*

Chapter I, Section 2, 3 and 4 of the By-Laws restricts registration and attendance at the annual meeting and its various sessions to members of the Association in good standing. Article IV, Section 4, of the Constitution defines those who may be admitted as guests, as physicians from outside Ohio, medical students and eminent members of scientific professions not medical but allied thereto.

THE ANNUAL DINNER

After omitting for several years the annual banquet during the meeting of the Ohio State Medical Association, the committee on Entertainment, in conjunction with the committee on Program, under the general chairmanship of Dr. S. J. Goodman, has arranged to revive that social feature. The annual dinner will be held at 7:00 P. M., Tuesday, May 13, in the Ball Room of the Neil House, at which the President, Dr. Albert H. Freiberg, and the President-elect, Dr. C. W. Waggoner, will present their presidential and inaugural addresses respectively. Other entertainment features are also being arranged in connection with the annual dinner. The committee on Entertainment of the Columbus Academy of Medicine, for the occasion, consists of Drs. Joseph Price, chairman; Roy E. Krigbaum, John W. Means, C. W. McGavran and L. M. Murphy.

CLINICS

Many members will undoubtedly arrange to come to Columbus on Sunday or Monday preceding the opening of the Annual Meeting on Tuesday morning, May 13, to attend the clinics, both wet and dry, which are being arranged at the various Columbus hospitals by the committee on Clinics of the Columbus Academy of Medicine, Monday, May 12. The Clinic Committee consists of Drs. Fred Fletcher, chairman; Andre Crotti, Wells Teachnor, Jr., I. B. Harris, Joseph Price, J. M. Rector, E. J. Gordon, G. Wayne Brehm, Ivor G. Clark, John Edwin Brown and A. M. Steinfeld.

Hotel Reservations for Annual Meeting May 13, 14 and 15, Should Be Made Immediately

For the benefit of members of the State Association who have not already made hotel reservations in Columbus during the week of the Eighty-Fourth Annual Meeting of the State Association, May 13, 14 and 15, the following list of Columbus hotels and their rates, published in the March issue of *The Journal*, is carried again.

Those who have not engaged rooms for the forthcoming annual gathering should do so NOW. Write directly to the hotel you select, stating kind of reservations desired and time of arrival and departure. Written verification of these instructions should be asked for.

Those who delay too long in writing for rooms may be unable to obtain reservations at the Neil House, the headquarters hotel and scene of the annual meeting, or other hotels centrally located. Send in your reservation immediately to one of the following hotels:

NEIL HOUSE, South High Street, opposite State House, 657 rooms; CONVENTION HEADQUARTERS; single room with bath, $3.00 to $5.00; double room with bath, $5.00 to $7.50; twin beds with bath, $5.50 to $7.50.

DESHLER-WALLICK HOTEL, Broad and High Streets, 1000 rooms; one-half square from headquarters hotel; single room with bath, $3.00 to $8.00; double room with bath, $5.00 to $10.00; twin beds with bath, $6.50 to $12.00.

FORT HAYES HOTEL, 33 West Spring Street, 300 rooms; three and one-half squares from headquarters hotel; single room with bath, $2.50 to $3.50; double room with bath, $4.00 to $6.00.

CHITTENDEN HOTEL, Spring and High Streets, 260 rooms, three and one-half squares from headquarters hotel; single room with bath, $2.00 to $3.00; double room with bath, $3.50 to $4.00; twin beds with bath, $4.50 to $5.00.

HOTEL SENECA, Broad Street at Grant Avenue, 75 rooms, six and one-half squares from headquarters hotel; single room with bath, $2.00 to $3.00; double room with bath, $3.50 to $5.00; twin beds with bath, $6.00 and up.

HOTEL CHARMINEL, State Street at Grant Avenue, 44 rooms, five and one-half squares from headquarters hotel; single room with bath, $2.50 to $4.00; double room with bath, $4.00 to $5.50.

NEW VIRGINIA HOTEL, Third and Gay Streets, 250 rooms, two and one-half squares from headquarters hotel; single room with bath, $2.00 to $2.50; double room with bath, $3.50 to $4.50.

NEW SOUTHERN HOTEL, Main and High Streets, 250 rooms; three and one-half squares from headquarters hotel; single room with bath, $2.00 to $4.00; double room with bath, $3.50 to $6.00; twin beds with bath, $5.00 to $7.00.

HOTEL WINTON, Town and Third Streets, 69 rooms, two and one-half squares from headquarters hotel; single room with bath, $1.50 to $2.00; double room with bath, $3.00 to $4.00.

ROL-EDDY HOTEL, 227 North High Street; 160 rooms, four squares from headquarters hotel; single room with bath, $2.00 to $2.50; double room with bath, $4.00 to $5.00.

HOTEL NORWICH, Fourth and State Streets, 100 rooms, two and one-half squares from headquarters hotel; single room with bath, $2.00 to $2.50; double room with bath, $4.00 to $5.00.

JEFFERSON HOTEL, 17 East Spring Street, 86 rooms, three and one-half squares from headquarters hotel; single room with bath, $2.00 to $2.25; double room with bath, $3.50 to $6.00.

HOTEL COLUMBUS, Long and Fifth Streets, 191 rooms, five and one-half squares from headquarters hotel; single room with bath, $2.00 to $2.50; double room with bath, $3.00 to $3.50.



ANNUAL MEETING SCENE

THE above picture, snapped from the dome of the State Capitol, shows the heart of Columbus which will be the scene of the Eighty-Fourth Annual Meeting of the Ohio State Medical Association, May 13, 14 and 15. At the left of the picture appears the Neil House, the headquarters hotel and place where all activities of the annual meeting will be staged. The monumental A. I. U. tower, located near the new Columbus Civic Center where the new State Office Building will be erected, is shown in the background.

Attention Golfers! You'll Want to Be Here

Tenth annual tournament of the Ohio State Medical Golfers' Association will be played at the Columbus Country Club, Monday, May 12, the day preceding the opening of the Eighty-Fourth Annual Meeting of the Ohio State Medical Association, to be held at the Neil House, Columbus, May 13, 14 and 15.

Reports reaching those arranging for the big sport event indicate that a record-breaking army of physician "Bobby Jones" and "Horton Smiths" will tee off in the scramble for the numerous prizes awaiting the lucky chasers of the elusive white pill.

Dr. J. L. McEvitt, Akron, who won the 1929 championship at Cleveland last May, is planning to be on hand to defend his crown.

Although the championship will hold the center of interest, there will be plenty of bait for the high-score shooters and the dubs. Prizes for low gross for 27 holes; low net for 27 holes; low gross for each 9; low net for each 9 will be awarded, as well as trophies for the granddad turning in the best score, the longest drive, fewest number of putts, high gross, team championship, etc. It is customary to offer a list of at least 30 prizes.

Officials of the Columbus Country Club, located on East Broad Street, six miles east of the city, predict that the beautiful course will be in tip-top shape for the tournament. It is one of the finest courses in Central Ohio and has been the scene of many famous golf events within recent years. It looks easy but has proven tough, according to Columbus physicians who have had an opportunity to match their skill with its deceptive fairways and heavily-trapped and lightning fast greens.

Automobile transportation for visiting physician golfers who do not drive to Columbus will be provided by Columbus physicians. Arrangements will be made to pick up the autoless golfers at the various hotels no later than 7 a. m. on the day of the tournament since the first foursome is scheduled to tee off promptly at 7:30 a. m.

The tournament will be climaxed with the annual banquet of the Medical Golfers' Association. This will be held in the evening at the clubhouse when trophies will be awarded and officers for the coming year elected. Every male member of the Ohio State Medical Association is eligible to membership in the Golfers' Association. Those who have not paid their annual dues to the Golfers' Association should do so at once to make them eligible to compete in the Columbus tourney. An initiation fee of $2.00 will be charged new members. Checks should be sent at once to Dr. J. B. Morgan, secretary-treasurer of the Golfers' Association, 1301 Medical Arts Building, Cleveland.

Present officers of the Association are:

Dr. C. A. Hyer, Columbus, president; Dr. F. T. Gallagher, Cleveland, first vice president; Dr. Lewis Feid, Cincinnati, second vice president; Dr. J. L. McEvitt, Akron, third vice president; Dr. T. L. Healey, Toledo, fourth vice president; Dr. J. B. Morgan, Cleveland, secretary-treasurer.

Northern Tri-State Meeting at Fort Wayne, April 8

Annual meeting of the Northern Tri-State Medical Society, consisting of physicians from Ohio, Indiana and Michigan, will be held at Fort Wayne, Indiana, April 8.

A scientific program, consisting of essays and clinics, will be held from 9 a. m. to 6 p. m. Following a banquet in the evening, a symposium on social medicine will be held.

Among the speakers at the morning and afternoon sessions will be: Dr. James Herbert Mitchell, Chicago—Skin clinic. Dr. Fred Cotton, Boston—Technique of Bone Graft Operations. Dr. Joseph Brennemann, Chicago—Empyema in Children. Dr. Carl D. Camp, Ann Arbor, Mich.—Effect of Emotions on Secretions, with Special Reference to the Thyroid. Dr. William P. Finney, Mayo Clinic, Rochester, Minn.—Diabetes. Dr. Robert M. Moore, Indianapolis—Some Observations on Heart Disease. Dr. Edwin W. Ryerson, Chicago—Ununited and Malunited Fractures. Dr. Charles A. Elliott, Chicago—Treatment of Liver Diseases.

Officers of the Northern Tri-State Medical Society are: President, Dr. Robert Hoffman, South Bend; vice president, Dr. Norris Gillette, Toledo; secretary, Dr. Charles F. Kuhn, Detroit, and treasurer, Dr. D. J. Slosser, Defiance.

Many International Medical Meetings Scheduled

Many international gatherings of medical, public health and scientific interest are scheduled to be held in foreign countries during the ensuing spring, summer and fall.

A number of Ohio physicians undoubtedly are planning to attend one or more of these meetings of associations and organizations with international connections while on vacations or en route to or from foreign medical centers. Many of these gatherings, such as the International Health Exhibition at Dresden, Germany, May 15-Sept. 30, promise to be of much interest to physicians who happen to be in the vicinity of their meeting places.

The Journal of the State Association is anxious to obtain the names of Ohio physicians who are contemplating attending any of the forthcoming international or foreign medical and scientific conventions. Members of the State Association are urged to forward such information as soon as possible to office of *The Journal*, 131 East State Street, Columbus.

Council Considers and Decides Many Matters Including Annual Meeting Plans at Meeting in March

COUNCIL MINUTES

The Council of the Ohio State Medical Association met in the headquarters office, Columbus, at 1:00 P. M., on Sunday, March 2, 1930.

The officers and councilors present were: Drs. Freiberg, Waggoner, Platter, Caldwell, Houser, Klotz, Slosser, Cummer, Stevenson, Shanley, Goodman, Stone; Dr. Upham, Chairman of the Policy Committee; Dr. Bigelow, former President; and Executive Secretary Martin and Assistant Executive Secretary Nelson.

The minutes of the Council meeting held in Columbus on Sunday, December 15, 1929, (published on pages 47 to 51, inclusive, of the January, 1930, issue of *The Journal*) were read, and on motion by Dr. Waggoner, seconded by Dr. Caldwell, and carried, were approved.

1930 ANNUAL MEETING

Dr. Waggoner, Chairman, and Dr. Goodman, Secretary of the Council Program Committee, reported in detail on the scientific program for the 84th Annual Meeting to be held in Columbus, Tuesday, Wednesday and Thursday, May 13, 14 and 15, 1930, prepared and submitted in proof form prior to this meeting to members of Council. Dr. Goodman reported to the Council the action of the Program Committee at its meeting on the morning of this day in adopting a ruling that the officers of each section may arrange and have in readiness one substitute paper for each session of each scientific section, to be read in case a regular essayist is absent, but that the title of such substitute paper and the name of the substitute essayist is not to be published in the program. This ruling means that only those papers regularly scheduled and expected to be presented are to be included in the printed program. This action also abrogates the previous ruling permitting one or more substitute papers to be scheduled in the program "to be read by title only."

Upon motion by Dr. Houser, seconded by Dr. Slosser and carried, the above ruling of the Program Committee was approved by the Council and authorized to be applied to the program for the forthcoming Annual Meeting.

Each section program was considered in detail and on motion by Dr. Stone, seconded by Dr. Stevenson and carried, was approved as presented and modified at this meeting of Council, and authorized to be published in full in the April, 1930, issue of *The Journal*.

The Program Committee also recommended that arrangements be made for the showing of motion pictures at 1:30 P. M., on Wednesday, May 14, at the same time the House of Delegates is in session and preceding the general scientific session at 3:30 P. M. The committee recommended that three separate one reel films be rented and secured from the Eastman Medical Film Company, on "Intestinal Peristalsis", "Simple Goiter", and "Benign Prostatic Hypertrophy". This recommendation of the Program Committee was approved by Council.

Suggestions from the local Entertainment Committee in connection with the general session on Tuesday evening, May 13, of the Annual Meeting, were submitted for consideration of Council, including the proposal to have a dinner or banquet, to be followed by the annual addresses of the President and President-elect. Upon motion by Dr. Klotz, seconded by Dr. Stevenson and carried, the Council decided to recommend to the local committee that a dinner be held on Tuesday evening, May 13, preceding the annual addresses, and that other details of entertainment in connection with that function be left in the hands of the local committees.

LADIES AUXILIARY

Dr. Freiberg, the President, submitted for the consideration of Council, recent correspondence which he had received, requesting favorable action by the Council on the organization and chartering of a Ladies Auxiliary in Ohio.

After detailed discussion and reference to previous Council action, (January, 1930, issue of *The Journal*, page 49; July, 1929, issue of *The Journal*, page 570; June, 1929, issue of *The Journal*, page 482; June, 1928, issue of *The Journal*, page 472; February, 1925, issue of *The Journal*, page 108; and August, 1924, issue of *The Journal*, page 530); on motion by Dr. Caldwell, seconded by Dr. Cummer and carried, the Council, after careful consideration, reaffirmed its former action on this question.

HEART COMMITTEE QUESTION

The President called attention to the consideration of communications and other material presented to the Council at its last meeting on December 15, submitted by Dr. Alfred Friedlander, on the plans and purposes of the Heart Committee, of which he is chairman, and the program of the Ohio Public Health Association, with which the former is affiliated. Attention was called to the Council discussion at the last meeting (pages 50 and 51 of the January, 1930, issue of *The Journal.*)

Dr. Waggoner called attention to the motion which he had submitted to the Council at the last meeting as follows: "that the Council reiterate the policies previously expressed by the Council and the House of Delegates, and that approval not be granted by the Council, pertaining to the Heart Committee program and budget of

the Ohio Public Health Association as requested in Dr. Friedlander's letter". Dr. Klotz seconded the foregoing motion which, being put to a vote, was carried.

QUESTION OF UNREGISTERED PUBLIC HEALTH NURSES

A communication was submitted from the headquarters office of the Ohio State Nurses' Association, calling attention to several specific incidences of public health nurses, unregistered in Ohio, employed by various county and city departments of health. Attention was also called in this communication to a recent ruling by the Attorney General of Ohio, holding in effect that nurses, employed by health departments, must, as a prerequisite, be registered in Ohio as required under the nurse registration laws.

On motion by Dr. Goodman, seconded by Dr. Stevenson and carried, the Council expressed itself as in agreement with the objection raised by the Ohio State Nurses' Association and officially expressed its opinion and pledged its cooperation in support of strict adherence to the legal requirements on this matter.

PROBLEMS OF LABORATORY PRACTICE

Dr. Waggoner submitted to the Council recent correspondence addressed to the State Association headquarters from Dr. Thomas L. Ramsey, Toledo, in relation to various types of laboratory practice, including advertised "cut rate" laboratory announcements and advertisements from several private laboratories, as well as detailed data on the extent and scope of laboratory service rendered by the laboratory of the State Department of Health, and by the laboratories of various local health departments. Data were also considered regarding the economic and professional angles of laboratory practice, as well as policies of the American Society of Clinical Pathologists. Attention was called to the result of a series of conferences in 1924 between representatives of the Ohio State Medical Association and officials of the State Department of Health. Reference was made to the annual report of the Medical Economics Committee in 1924, (published on pages 295 and 296 of the May, 1924, issue of *The Journal*) pertaining to these questions. Attention was also called to policies announced by the State Department of health in relation to laboratory service, published in the November, 1924, issue of *The Journal*, pages 701 and 702.

On motion by Dr. Waggoner, seconded by Dr. Cummer and carried, the Council referred this question, together with correspondence and other data and records, to the Medical Economics Committee for consideration jointly with others who might be invited by the committee to confer upon the subject.

AN APPEAL TO THE COUNCIL

Dr. Klotz submitted to the Council detailed communications and other records from Dr. D. F. Russell, Van Wert, Ohio, in the form of an appeal to the Council from the action of the Van Wert County Medical Society in rejecting the membership dues of Dr. Russell, thus depriving him of membership.

These records and documents were considered and discussed in detail. On motion by Dr. Caldwell, seconded by Dr. Cummer and carried, a special meeting of the Council was scheduled to be held in the headquarters office of the State Association at 1:00 P. M., on Sunday, March 16, 1930, to which meeting Dr. D. F. Russell should be invited to attend to present his appeal in person, and to which the President and Secretary of the Van Wert County Medical Society should be requested to be present to represent the Society, and to bring with them to this meeting a copy of the constitution and by-laws of the Van Wert County Medical Society, and the minute books and other records of the Society bearing on the case of Dr. Russell and on the relationship of the Van Wert County Medical Society to the Van Wert County Hospital Association.

The foregoing motion contemplated that official notice to attend the special Council meeting on March 16, should be sent promptly by the Secretary of Council to Dr. Russell and to the President and the Secretary of the Van Wert County Medical Society, with a request that prompt reply be made within two days of their receipt of such notification and of their intentions in regard to attendance at the March 16th Council meeting.

MENTAL HYGIENE ASSOCIATION

The President called the attention of the Council to recent developments in connection with the new Ohio Mental Hygiene Association, and especially to an organization meeting held in Columbus on February 19. Also for the information of the Council, attention was called to the Council action at its meeting on May 6, 1929, on this matter, (published on page 482 of the June, 1929, issue of *The Journal*) and to the minutes of the Mental Hygiene Committee of the Ohio State Medical Association of April 30, 1929.

DELEGATE TO PHARMACOPOEIAL CONVENTION

Dr. Upham called attention to the holdover action on the question of a delegate to the Eleventh Decennial Pharmacopoeial Convention to be held in Washington, D. C., May 13, 1930, and to the action of the Council at its last meeting (pages 48 and 49 of the January, 1930, issue of *The Journal*). He reported that pursuant to the authorization by the Council to the Policy Committee, that Dr. Clayton S. Smith, Professor of Physiological Chemistry, Pharmacy and Materia Medica, in the Medical College, Ohio State University, was recommended by his committee for selection as official delegate from the Ohio State Medical Association, and that a sum of $50.00 be provided to be applied as partial ex-

penses for Dr. Smith in attendance at that convention. The President announced that the Council had already authorized the action by Dr. Upham and the Policy Committee on behalf of Council, and that this report by Dr. Upham is officially approved.

QUESTIONS ON WORKMEN'S COMPENSATION

The President called attention to some of the problems in connection with medical services under the Ohio Workmen's Compensation Law. He cited several cases wherein the attending physician did not know the case was expected to be a workmen's compensation case until after services had been rendered and treatment applied. He cited several instances in which officials of industry who might be expected, as private patients, to pay more adequate fees for medical and surgical service, had, in fact, been Industrial Commission cases without notifying the physician at the time. He called attention to the desirability of some administrative procedure and ruling whereby those seeking medical and surgical attention, and expecting to come under the Workmen's Compensation Law, should be required to so notify the physician at the time the latter is retained to render professional service.

Upon motion by Dr. Goodman, seconded by Dr. Stevenson and carried, this problem was referred to the Medical Economics Committee.

QUESTION OF ETHICS AND ADVERTISING

Correspondence was submitted relative to the advertisement in a local newspaper of a physician who announced himself as practicing a specialty "exclusively". The advertisement was submitted by another physician who made the statement that the physician so advertising is not exclusively engaged in a specialty, and requesting an interpretation as to whether such advertisement constituted a violation of the Principles of Ethics. The Council instructed the Secretary to suggest that this question be submitted to the proper officers of the county medical society in which this advertisement appeared.

NARCOTIC LEGISLATION

Dr. Caldwell called the attention of Council to pending legislation in Federal Congress, known as H. R. 9053, and H. R. 9054, introduced by Representative Porter, of Pennsylvania, as being unnecessary, costly and unjustified duplication of effort and detail placed upon physicians, pharmacists, dentists and veterinarians. He also pointed out that the proposed legislation would probably not strengthen enforcement nor the suppression of illegal traffic in narcotics, but that it would place additional restrictions and detailed burdens upon physicians in their legitimate professional practice.

Upon motion by Dr. Caldwell, seconded by Dr. Stevenson and carried, the Council placed itself officially on record in protest against the enactment of H. R. 9053, and H. R. 9054, for the reasons set forth in an article on this subject on pages 250 and 251 of the March, 1930, issue of the *Ohio State Medical Journal* and in the leading editorial in the *Journal of the American Medical Association* of February 8.

MEMBERSHIP DATA

A report on the status of the membership in the Ohio State Medical Association showed a total on March 1, 1930, of 4576 whose dues had been received for 1930, as compared with a total of 4710, on the same date in the preceding year, and as compared with a total for 1929, of 5528. Various councilors expressed their intention of emphasizing to the county societies in their respective districts, the desirability of urging prompt payment of dues by all those now delinquent.

ACTION ON FOOD FADS

Dr. Upham, Chairman of the Policy Committee, presented for the consideration of the Council the following resolution:

WHEREAS, False propaganda, misinformation and exaggerated claims are being widely disseminated in connection with various food and nutritional fads and unscientific diets, and

WHEREAS, Any balanced diet should contain animal protein, fruits, vegetables, especially the leafy vegetables, and the better grades of bread prepared from flour which will insure adequate vitamin and mineral salt content, digestible fat such as butter-fat, and sufficient of the digestible carbohydrates to afford readily available energy; and

WHEREAS, The allegation that meat, white bread, or any other staple food included in a mixed diet is responsible for certain grave illnesses, is not supported by scientific facts; and the danger of nutritional deficiencies has been grossly exaggerated by faddists, and

WHEREAS, Any variation from a normal diet should be prescribed only by a properly trained physician after a careful study of the dietary requirements of the individual, therefore

BE IT RESOLVED, That the Council of the Ohio State Medical Association hereby places itself on record as above, in pointing out and condemning from the standpoint of public and individual health, the unscientific food fads and the various special and unbalanced diets.

Upon motion by Dr. Houser, seconded by Dr. Caldwell and carried, the Council approved the foregoing resolution and authorized its transmission on behalf of the Council to the House of Delegates with recommendations for adoption.

MISCELLANEOUS

The President called attention to the detailed proposed amendments to the Constitution and By-Laws, and the report of the committee on Revision of the Constitution, published on pages 235 to 249, inclusive, of the March, 1930, *Journal*. Various proposed amendments were discussed at length by members of the Council.

The President called the attention of the Council to the fact that Dr. E. C. Brush, Zanesville, former President of the State Association, had contributed to the State Association headquarters, seventeen volumes of annual transactions of the Ohio State Medical Society of former years, assisting in the completion of the organization records. On motion by Dr. Goodman, seconded by Dr. Cummer and carried, the Council formally and officially expressed appreciation to Dr. Brush for this contribution.

There was presented to the Council a communication from John A. Kingsbury, New York, Secretary of the Committee on the Celebration of the Eightieth Birthday of Dr. William Henry Welch, for April 8, 1930. On motion by Dr. Goodman, seconded by Dr. Shanley and carried, the Secretary of Council was instructed to send a telegram of congratulation on behalf of the Council, on the proper date, to Dr. Welch.

OTHER POLICY QUESTIONS

There was submitted to the Council a communication from Dr. R. Woerner, Executive Secretary of the American Delegation to the International Hygiene Congresses, to be held in Dresden, Germany, May 15 to September 30, 1930, formally inviting the Ohio State Medical Association to be represented at those sessions.

Attention was called to the fact that a number of international scientific conventions and congresses were scheduled to be held at various cities in America, Canada and abroad, during the next few months. Problems in connection with official delegates were discussed at length. On motion by Dr. Stevenson, seconded by Dr. Goodman and carried, it was suggested to the Publication Committee of *The Journal* that a news item be carried in an early issue, requesting those members who expect to attend international medical meetings during the next few months, to submit this information to the Council, through the headquarters office.

For the information of the Council, there was submitted recent correspondence from the American Social Hygiene Association, relating to the history and status of social hygiene activities in various states and in Ohio, the latter in connection with the Ohio Public Health Association.

As a matter of public interest, members of Council discussed a number of the suggested proposals which might be considered by the next session of the Ohio Legislature, under the recent constitutional amendment on taxation. Opposition was expressed to either a special occupational tax, or a state income tax at this time.

The Council adjourned to meet again on Sunday, March 16, 1930.

S. J. GOODMAN, M.D.
Secretary of Council.

Excessive Hopes Caused Among Cancer Sufferers Through Excessive Publicity

The method being used by two San Francisco physicians in the treatment of cancer, which has been given widespread publicity in the public press, has been the subject of an unusual amount of discussion recently among members of the medical profession.

Because of the publicity given the work being done by Drs. W. B. Coffey and J. D. Humber, the public also has displayed much interest in their scientific experiments and many sufferers from cancer have been misled through newspaper articles into believing that the California physicians have found a certain cure for the disease. Large numbers of sufferers have flocked to San Francisco to be "cured" despite statements issued by Drs. Coffey and Humber that their work is still in the experimental stage.

The situation illustrates once more the danger of premature announcements of remedies based on methods still in the experimental stage and which have not produced sufficient results to merit the approval of the medical profession generally.

As one Ohio newspaper pointed out editorially:

"The pitiful spectacle of scores of cancer victims flocking to California shows how easily a discovery can be commercialized and made productive of large financial results. It is to the credit of the great scientists in medicine that exploitation of discoveries has not been tried. There is no more pathetic and pitiful sight in this country than the rush of the afflicted when some new cure is announced. Cancer victims all over the land are eager to reach the new cure, if it is a cure. The regular method of making public the important discoveries in medicine has much to recommend it. The afflicted are spared the pain of hopes aroused that may not be realized."

Every Ohio physician should read the comments which have appeared within the past few weeks in the *Journal of the American Medical Association*, regarding the Coffey-Humber cancer experiments, especially the article and correspondence published in the March 1, 1930, issue of the *A. M. A. Journal.*

These comments caution physicians and the public about acceptance of unestablished methods of treating cancer, as well as other diseases.

Naturally, the medical profession is interested in the Coffey-Humber work which may eventually contribute much to investigations in the field of cancer. However, physicians should continue to be cautious in discussing such work until it has proved its value, for fear of arousing false hopes in the minds of those who come to them for advice and counsel.

Careful Checkup by Narcotic Agents Again Emphasized Importance of Adherence to Regulations

Within recent months, federal and state authorities charged with the enforcement of the federal and state narcotic laws and regulations have been checking the records of physicians and others who prescribe or dispense drugs.

The investigation has revealed that some confusion exists as to the meaning of some of the regulations. Some technical violations of the regulations have been found, indicating, authorities say, that all who are required to register under the Harrison Act are not wholly familiar with the proper procedure to be followed in prescribing, dispensing, registering for permits, etc.

All physicians are urged to check up to see that they are following the rules and regulations promulgated by the U. S. Treasury Department relating to narcotics and to see that all records required to be kept under the regulations are being properly made out and filed.

The Ohio narcotic laws several years ago were revised and made to conform to the Federal statutes, so physicians who adhere strictly to the federal rules and regulations need have no fear of violating the state laws on narcotics.

The following summary of the federal narcotics statutes and regulations may be helpful to members of the State Association in determining what must be done to conform to all the federal requirements:

Every physician wishing to prescribe or dispense narcotics must register with the collector of internal revenue of his district and pay the special federal tax of $1 on or before July 1 of each year.

Physicians wishing to prescribe and dispense must register in Class 4. Physicians wishing to dispense tax exempt narcotics must register also in Class 5. If registered in Class 4, no additional fee is required for registration in Class 5. Those in Class 5 only may dispense non-taxable narcotics.

The best way to distinguish between taxable and tax-exempt narcotics is to examine the container for the revenue or commodity stamp of the government. Tax-exempt narcotics do not contain the government stamp on the container.

Narcotic drugs and preparations must at all times be securely kept and properly safeguarded where they will be available for inspection by properly authorized officers.

Where narcotic drugs or preparations are lost or destroyed, affidavit as to the quantity and kind of drugs lost or destroyed and the reason thereof should be made and sent to the narcotic agent of the district.

Loss of narcotics by theft or in transit from any cause must be reported to the narcotic agent of the district in a sworn statement giving the list of the drugs and preparations and evidence that the local police authorities were notified. A copy of such statement should be filed with the duplicate order form.

A sworn inventory of narcotics in the possession of the applicant for a permit on a given date must accompany the application for permits in Class 3, 4 and 5. An inventory of preparations and remedies which are tax-exempt is not required.

Narcotic prescriptions must be issued in the course of professional treatment.

In explaining the legality of narcotic prescriptions and the prescribing of narcotic drugs for habitual users or addicts, Article 85 of the law states:

"A prescription in order to be effective in legalizing the possession of unstamped narcotic drugs and eliminating the necessity for use of order forms, must be issued for legitimate medical purposes. An order purporting to be a prescription issued to an addict or habitual user of narcotics, not in the course of professional treatment but for the purpose of providing the user with narcotics sufficient to keep him comfortable by maintaining his customary use, *is not a prescription within the meaning and intent of the act; and the person issuing it, may be regarded as guilty of violation of the law.*

"*Exceptions*—Exceptions to this rule may be properly recognized (1) in the treatment of incurable diseases, such as cancer, advanced tuberculosis, and other diseases well recognized as coming within this class, where the physician directly in charge of a bona fide patient suffering from such disease prescribes for such patient, in the course of his professional practice and strictly for legitimate medical purposes, and in so prescribing endorses upon the prescription that the drug is dispensed in the treatment of an incurable disease; or if he prefers he may endorse upon the prescription 'Exception (1), article 85.' (2): A physician may prescribe for an aged and infirm addict whose collapse would result from the withdrawal of the drug, provided he endorses upon the prescription that the patient is aged and infirm, giving age; or if he prefers he may endorse upon the prescription 'Exception (2), article 85'."

Many physicians have found it good practice in treating aged and infirm addicts, to register the name of such addicts with the Internal Revenue Departments of their districts.

It has been held by the courts that a physician is guilty of violating the Harrison Narcotic Act

if he issues a prescription not in good faith. The U. S. Circuit Court of Appeals in a decision involving this phase of the law, held that if a physician issues a prescription not in the course of professional practice, with intent that the recipient shall obtain narcotics from a druggist upon such prescription, and the prescription is not given in good faith for the treatment of disease, he takes a principal part in the prohibited sale, no matter whether the quantity is great or small, or whether the druggist has knowledge of the circumstances under which the physician has given the prescription or is advised of any relationship that may have existed between the physician and the recipient of the prescription.

The United States Supreme Court a number of years ago in an opinion on issuance of a prescription to an addict, stated:

"What constitutes bona fide medical practice must be determined upon the consideration of evidence and attending circumstances. Mere pretense of such practice, of course, cannot legalize forbidden sales, or otherwise nullify valid provisions of the statute, or defeat such regulations as may be fairly appropriate to its enforcement within the proper limitations of a revenue measure."

Issuance of prescriptions for or dispensing quantities of narcotics to persons who have made a self-diagnosis of their ailment or to relatives or friends representing such persons are generally regarded as unwise policy and poor medical practice. Every physician should himself be the judge of the need of the use of narcotics and should not issue a narcotic prescription to anyone who is not diagnosed and whose treatment is not directly supervised personally by him in the course of professional treatment.

All prescriptions for drugs and preparations not specifically exempt under section 6 of the Federal Narcotic Law must be dated as of and signed on the day when issued and must bear the full name and address of the patients and the name, address and registry number of the physician.

Prescriptions must be written in ink, indelible pencil or typewritten; if typewritten, they should be signed by the physician.

Practitioners may administer narcotics to bona fide patients pursuant to the legitimate practice of their professions without prescriptions or order forms.

All orders forms, duplicate forms, prescription records, returns and inventories required under the law or regulations must be kept on file and available for inspection for a period of not less than two years.

Physicians are not required to keep a record of drugs administered to persons upon whom they in the course of their professional practice are in personal attendance.

Physicians who administer in their office minute quantities of narcotics may keep a record of the date when a stock preparation is made or purchased and the date when such stock preparation is exhausted, which will make it unnecessary for them to keep a record of the name and address of each patient.

Physicians dispensing must secure narcotic supplies from wholesale dealers registered in Class 2 on a proper government form, a duplicate of which the physician must keep on file for two years.

Order forms are not required for preparations and remedies which do not contain more than two grains of opium, or more than one-fourth of a grain of morphine, or more than one-eighth of a grain of heroin, or more than one grain of codeine, or any salt or derivative of any of them in one fluid ounce, or if solid or semi-solid preparation, in 1 avoirdupois ounce; or to liniments, ointments, or other preparations which are prepared for external use, only except liniments, ointments, and other preparations which contain cocaine, or any of its salts, or alpha or beta eucaine or any of their salts or any synthetic substitute for them, provided, however, that such remedies and preparations are dispensed or possessed as medicines and a record of dispositions is kept as required under the law.

Death Rates in the Registration Area

Ten states and the District of Columbia recorded a lower infant death rate in 1928, the last year for which figures have been compiled by the Bureau of Census, than in any year since admission to the birth registration area, according to an analysis made public by the Children's Bureau of the U. S. Department of Labor.

Oregon, which reported the lowest rate in 1927, broke its own record and again led the United States in 1928, with a rate of 47 deaths per 1,000 live births, the report stated. This is the lowest rate ever reported by any state in the birth registration area, it is pointed out.

The rate for the birth registration area as a whole in 1928 was 69 deaths of infants under one year per 1,000 live births.

The other states with low rates were:

Washington (48), Iowa (53), North Dakota (59), Montana (61), Massachusetts (64), Vermont (65), District of Columbia (65), West Virginia (70), Maine (73) and Maryland (80).

Six states which achieved their lowest infant death rate in 1927 maintained the same rate in 1928. These were California (62), Illinois (64), Connecticut (59), New Hampshire (69), Florida and Rhode Island (67).

Twenty-five states and the District of Columbia has lower infant mortality rates in 1928 than the rate of the birth registration area as a whole.

Problems Concerning Medicinal Liquor Raised Under Pending Federal Prohibition Proposal

Misunderstandings and confusion have developed within the past month relative to the effect the passage of the Williamson Bill (H.R. 8574), now pending in the Congress of the United States, would have on the rights of physicians and hospitals to possess and administer medicinal liquor and to use alcohol for surgical and laboratory purposes.

The Williamson Bill, passed by the House of Representatives on February 8 and now awaiting the action of the Senate provides for the creation of a Bureau of Prohibition in the Department of Justice and transfers to the Attorney General of the United States certain functions in the administration and enforcement of the National Prohibition Act, as amended.

The measure specifically provides that the Attorney General and the Secretary of the Treasury shall jointly prescribe all regulations under H.R. 8574 and regulations for the administration and enforcement of the National Prohibition Act. The bill further provides that in event of its enactment it shall take effect on the first day of the second month after its approval and that all regulations in force prior to the effective date of the act shall be void after that date, unless they have been reissued under the act.

In view of the time limit specified by the bill, a government committee composed of representatives of the Department of Justice and the Treasury Department have been drafting and outlining regulations that the Attorney General and the Secretary of Treasury are expected to issue.

It is understood that this drafting committee has faced some difficulty in formulating regulations governing the purchase, possession, transportation and use of medicinal liquor and alcohol by physicians and hospitals for lawful, professional medical, surgical and laboratory purposes. Whether to recommend the reissuance of the present regulations governing the possession and use of medicinal liquor or suggest a revision of the regulations now in force, is the question before the committee for decision.

The Williamson bill itself does not propose any change in the present privileges granted physicians and hospitals to obtain six quarts of medicinal liquor annually and an adequate supply of alcohol for professional uses. The matter of extending this right to physicians and hospitals is left entirely to the discretion of the Attorney General and the Secretary of the Treasury, authorized by the bill to make regulations necessary for administration and enforcement of the National Prohibition Act.

One question understood to be puzzling the regulation drafters is that pertaining to the legal basis of the right now conceded physicians and hospitals of obtaining and using medicinal liquor and alcohol.

The present National Prohibition Act does not specifically authorize physicians professionally to possess or to administer or otherwise use alcohol or medicinal liquors. However, it does specifically authorize physicians to prescribe them under certain limitations.

Neither does the federal act authorize hospitals and sanatoriums to possess or to administer or otherwise use alcohol and medicinal liquors, except bona fide hospitals and sanatoriums engaged in the treatment of persons suffering from alcoholism.

However, under the present regulations promulgated by the Commissioner of Prohibition, with the approval of the Secretary of the Treasury, the professional right of physicians and hospitals to obtain, administer and use medicinal liquor and alcohol for medical, surgical and laboratory purposes has been recognized and the privilege of doing so under certain limitations conceded. It has been held by officials charged with administering and enforcing the Prohibition Act that uses of medicinal liquor and alcohol for medical, surgical and laboratory purposes are within the intent and scope of the law.

In a recent analysis of the Williamson Bill and a discussion of the new set-up provided by it, the *Journal* of the American Medical Association declared editorially:

"Although the restrictions laid down by Congress as outlined relate only to the quantity of liquor that may be supplied on prescription, they show the intent of Congress with respect to the medical and surgical use of alcohol and liquor. The Attorney General and the Secretary of the Treasury are bound to respect them in any regulations they may promulgate. The Attorney General and the Secretary of the Treasury, and the committee now at work, will no doubt inform themselves adequately concerning the effectiveness of existing regulations before they disturb them.

"If existing regulations permit the diversion of alcohol and liquor from medical, surgical and laboratory uses to beverage purposes, it will be necessary to determine how regulations may be framed that will prevent such diversion and at the same time provide the medical profession with the alcohol and liquor needed in the course of professional practice. The determination of these questions is the problem in which the medical profession as well as the committee is interested."

At the present time, it seems possible that the United States Senate may postpone consideration and action on the Williamson Bill until after the

committee drafting the regulations to supercede the present regulations has completed its work. Those close to Congressional activities are of the opinion that enactment of the Williamson measure depends largely on the kind of regulations that would be promulgated under the dual administration.

Some doubt has been expressed as to the advisability of giving control and supervision of permits to prescribe, obtain and use medicinal liquor for lawful purposes to the Department of Justice, as well as the Treasury Department.

Those who object to this provision of the Williamson Bill point out that the granting of such authority to a department specifically engaged in the detection and prosecution of crime might lead to the practice of automatically classifying all permit holders as potential law violators and might have a tendency to break down the cooperation which exists at present between the Treasury Department and permittees, the great majority of whom are making legitimate uses of the privileges granted them by their permit.

Many who have studied the situation are of the opinion that the better method would be to leave the permittees where they are—under the supervision of the Treasury Department—where they would not be subject to surveillance by the Department of Justice unless there was reason to believe that they were violating the law. It is pointed out that the intent of the National Prohibition Law is believed to be that those charged with its administration and enforcement shall cooperate and render a service to those legally entitled to possess and use liquor and alcohol, and that those who make legitimate use of the rights granted them shall not in any sense of the word be regarded as potential criminals.

Recent Maternity and Infancy Developments

A great deal of propaganda issued by proponents of the Jones-Cooper bill, reviving maternity and infancy activities as carried on under the old Sheppard-Towner Act and now pending in Congress, has been carried in the public prints, indicating that those in favor of this subsidy type of public health work are going to put up a hard fight for enactment of this objectional legislation.

According to a public statement issued recently by Representative Cooper of Ohio, one of the authors of the bill, "there is tremendous interest all over the country in the legislation, but there is likewise considerable opposition to it."

One of the chief arguments made by proponents of the measure is that the death rates among babies and mothers in the United States is mounting and that the rates in this country are higher than in 15 other leading nations.

This statement has been challenged. The editor of the *Illinois Medical Journal* is one opponent of the Jones-Cooper bill who charges that such propaganda is absurd and misleading.

Editorially he attacks the argument as follows: "This is not true. It has never been proved and it cannot ever be proved there is found some greatest common denominator of census taking whereby statistics submitted for comparison have all been secured, arranged and classified and computed by the same yardstick or rule of thumb.

"At present there is a complete lack of uniformity in the method of gathering maternal mortality statistics or any other statistics. Naturally, then, death rates in different countries cannot be compared with the slightest degree of accuracy. . . . If the truth were known probably there would be shown a more favorable maternity death rate in the United States than in any other country."

In this connection, it is interesting to note that the 1928 maternity mortality rate in Illinois, one of the states which repudiated the old Sheppard-Towner Act, was considerably smaller than the rate in any of the states which operated under the act.

Additional evidence that opponents of such maternity and infancy legislation are anything but inactive is found in press dispatches from Washington within the past two weeks, stating that President Hoover had been informed by Mrs. William Lowell Putnam and Mrs. Frances E. Slattery, both of Boston, at a conference of their intentions to form a national organization of the "silent women of America" in an effort to abolish the Children's Bureau and to oppose legislation to "nationalize" the children of the country.

Mrs. Putnam is reported as having informed the President that their opposition was directed at certain child welfare legislation sponsored by the Bureau, including the Sheppard-Towner Act. She declared that the campaign would be carried on first by education, then through publicity and legislation. No opposition would be voiced against measures of "real social worth", but only against legislation inspired by "communistic" groups, she said she told Mr. Hoover.

President Hoover was represented by the Boston women as having expressed the desire that they work along "constructive" lines and as having told them that the Children's Bureau had done some good work in connection with child welfare activities.

Seizure of 557 pounds of anesthetic ether that does not meet the requirements of the United States Pharmacopoeia has been announced by the Food, Drug and Insecticide Administration of the United States Department of Agriculture. Part of the ether seized contained peroxide which is not allowed by the standard, the announcement stated, while the rest was found in a substandard condition due to deterioration after being packed.

Questions of Medical Education and Licensure are Discussed at Federation Meeting at Which Dr. Platter, Retiring President, Sounds Keynote

Necessity of a definite national program designed to bring about greater uniformity in the medical practice acts and regulations of the various states; to harmonize the state on the matter of medical legislation, and to serve as a basis for revision of the rules and regulations made by the various State Medical Boards relative to reciprocity has been emphasized for quite some time by many leaders of organized medicine.

These important phases of the question of medical licensure and legislation were studied and discussed and definite steps toward a solution of some of the alleged ills of the present disjointed national system of medical licensure and legislation were taken at the recent annual Congress on Medical Education, Licensure and Hospitals held at Chicago.

Interesting discussions of the questions previously enumerated were held during the sessions of the Federation of State Medical Boards, of which Dr. H. M. Platter, secretary of the Ohio State Medical Board and treasurer of the Ohio State Medical Association, was the retiring president. Dr. J. H. J. Upham, member of the Ohio board, dean of the College of Medicine, Ohio State University, and a member of the Board of Trustees of the A. M. A., also took part in the meeting of the Federation and the sessions of the Council on Medical Education and Hospitals.

Consideration of Basic Science legislation occupied a prominent place on the program of the Federation. A report of the Executive Committee of the Federation, to which had been delegated the task of making a survey of the Basic Science Acts of six states and the District of Columbia as an enforcement measure, was submitted.

This survey, made through the medium of questionnaires sent to secretaries of boards of medical examiners, secretaries of Basic Science boards, editors of state medical journals, health commissioners and secretaries of county medical societies of these states, revealed, the Executive Committee reported, that Basic Science Acts are not enforcement measures.

"All states report themselves satisfied with Basic Science legislation and indicate that it has acted to prevent the issuance of cult licenses because of the inability of the cultist to obtain the coveted Basic Science certificate before entrance to examinations conducted by cult boards," the Committee declared. "In this manner the wholesale issuance of licenses has been prevented, but prosecutions for practice without a license have not been undertaken except in one or two instances, according to reports. It would seem from this that in states having multiple boards an effect has been produced only insofar as the issuance of licenses is concerned."

In concluding its report, this committee advocated an action, which if carried out, would result in revision of all present Basic Science laws to exempt from its provisions persons licensed after graduation from schools holding membership in the American Medical College Association.

This policy, approved by the Federation in ratifying the report of the Committee, was expounded as follows in the report:

"The Executive Committee recommends that steps should be taken in the various states which have Basic Science Acts to amend these acts so that men holding credentials of graduation from Class "A" medical schools, members of the American Medical College Association, may be exempt from the Basic Science examinations after a review of such credentials by the Basic Science Board. The Committee believes that administration should be conducted to promote interstate relations and regrets that Basic Science Acts at present interfere with reciprocity and holds to a belief in the soundness of the action of the Federation in 1929 when the standards of the American Medical College Association was approved."

"If as rapidly as possible this can be put into effect in the several states," he declared, "there will develop an American standard of qualification. It seems to be plain that when that day day arrives and all subscribe to and administer the several practice acts in conformity therewith, the matter of reciprocity or exchange of credentials, that is interstate relations, is solved by the board of one state accepting the examination given by another after the credentials of the applicant have been verified and after he has met such other qualifications as is required for admission to the examination in the state to which he is making application. Of course, no state will waive the right of inquiry into moral character and ethical practice."

"So far we approach the problem of administration in a united manner," he continued. "When, however, for local reasons there is imposed an additional burden or obligation in one state which is not expected in another in excess of the requirements of the American Medical College Association which we have adopted as our standard, complications arise which demand solution. Suggestion is made that a way can be devised in all the states *whereby this additional requirement may be waived by exemption after a review of the credentials of the man of qualification by the proper authority and in this manner*

reciprocity or interstate relations will not be interfered with."

Lauding the substantial progress which has been made in the field of medical education and pointing out the improvement which has taken place in the character of the examinations given in the various states, Dr. Platter concluded his address with an exposition of his views on medical practice standards and medical legislation in general:

"It is the business of medical men to pass upon the qualifications of properly qualified individuals to treat the sick. Spasmodic will be the results of lay administration in this field for the layman is as unacquainted and as far from home in it as are we in the field of finance. If only qualified individuals are licensed to heal the sick and hold legal recognition permitting them to testify in court and sign legal documents, a system followed in Great Britain, I believe the greatest good in the field of licensure will have been accomplished.

I am reaching the conclusion that the individual who persists in his efforts to find a charlatan to treat him when competent practitioners are in his midst, should work out his own salvation.

At the business session of the Federation meeting, Dr. Charles B. Pinkham, Sacramento, California, was installed as president, succeeding Dr. Platter, and Dr. Harold Rypins, Albany, New York, was elected president-elect. Dr. Walter L. Bierring, Des Moines, Iowa, was re-elected secretary-treasurer. Dr. Platter was elected a member of the executive committee, this action initiating a new policy of the Federation to have the retiring president of the body automatically become a member of the executive committee.

Some Angles of Charitable Health Activities

Iowa physicians, through the Iowa State Medical Association and the various component county medical societies, are attempting to solve the health center problem which has been an issue in that state, as in most other states.

According to the *Journal of the Iowa State Medical Association*, "there is a growing sentiment among Iowa physicians that public and charitable health activities need more professional attention and direction".

That publication points out that this proposal is based on two fundamental principles, namely: (1) that a safe and constructive lay health program can be defined and mapped out only with the sympathetic counsel and the direction of the medical profession as such; (2) that the success in practically every one of the lay health activities is based upon the free services rendered by physicians, and that they therefore should determine the conditions under which such services are to be given, rather than to have them determined by the non-professional directors or recipients of this free medical service.

Following these principles, the various county societies of Iowa are holding conferences with public and lay agencies with the hope of reaching agreements that will put the county medical society in its proper and rightful place in all health and medical undertakings.

As a guide for the county societies in their negotiations, a specially appointed medical economics committee made a thorough investigation of conditions in Iowa relative to "the prevention of disease in the mass" and "matters affecting the economic status of physicians", and drafted the following resolutions, setting forth certain policies and principles concerning several important phases of these two questions:

1. Resolved: That we recommend that vaccination and immunization be done at the office by first choice and not in the schools as such work can not be done in a sanitary way in the school room; and that, where such work is done in mass, for a brief period (such as a month) and at fixed daily hours a reduction (such as 50 per cent) of the regular charge be made and the serums and vaccines be furnished by the physician.

2. Resolved: That health examinations should be made by the family physician for an individual fee depending upon the extent of the examination; and that any other method should be undertaken only upon approval of the county medical society.

3. Resolved: That no member of the Iowa State Medical Society should contribute services to any free clinic or dispensary unless it has the approval of the county medical society.

4. Resolved: That examinations in connection with 4-H Club health contests, baby health contests and similar examinations, should be conducted exclusively by members of the county medical societies upon approval of the county society and that such service should be contributed without charge.

5. Resolved: That in accordance with the resolution of the House of Delegates last May disapproving of Sheppard-Towner clinics, we urge that the State University College of Medicine proceed to offer post-graduate instruction throughout the state as a substitute for clinics formerly conducted by the University Extension Division.

6. Resolved: No contracts for the care of the county poor shall be entered into by an individual member unless it shall have had the approval of the county society.

This concerted move by the medical profession in Iowa to demand its rightful place as a leader in all health and medical activities will undoubtedly do much to define and limit the clinic and free-service situation in that state. County societies in all states facing similar problems can obtain results if they take sufficient interest in such affairs.

Summary of Industrial Accidents and Diseases Compiled for Calendar Year of 1929

During 1929, 261,900 workers in Ohio industries were victims of accidents, according to a statement issued by the Division of Safety and Hygiene of the State Industrial Commission.

Of this number, 1,295 were killed; 35 suffered permanent total disability and 2,585 sustained mishaps causing permanent partial disability. The time loss to workers by reason of these accidents reached the total of 11,732,479 days, an economic loss of millions of dollars, the Division points out.

The severity of these accidents ranged from 59,046 causing over seven days loss of time and 37,043 causing a time loss of seven days or less, to 161,895 causing no time loss but necessitating medical attention.

During the year Ohio workers lost 245 eyes (four being totally blinded); 44 arms (one lost both arms); 47 hands (one lost both hands); 34 legs; 4 feet; 1,869 whole fingers (444 lost two or more fingers); 1,038 parts of fingers (61 lost parts of two or more fingers); and 111 toes.

Segregated by statisticians by separate classifications of industry, the 1929 accidents were as follows: Building erection and demolition 23,356 with 144 fatalities; construction (other than building erection) 8,721 with 74 fatalities; chemicals and allied products, 6,076 with 30 fatalities; clay, glass and stone products, 11,387 with 29 fatalities; foods and beverages, 9,270 with 39 fatalities; laundries, 1,591 with 9 fatalities; lumber and wood products, 8,650 with 43 fatalities; blast furnaces, steel works and rolling mills, 14,836 with 101 fatalities; assembling and erecting machinery, 1,243 with 7 fatalities; machinery manufacture, 13,079 with 23 fatalities; metal goods manufacture, 74,522 with 128 fatalities; vehicle manufacture, 9,090 with 21 fatalities; paper and printing, 7,000 with 22 fatalities; rubber and composition goods, 6,965 with 22 fatalities; textiles and clothing manufacture, 3,710 with 9 fatalities; mining, 6,375 with 108 fatalities; quarries and stone crushing, 2,049 with 28 fatalities; transportation, 1,896 with 27 fatalities; utilities, 3,062 with 65 fatalities; cartage and trucking 3,834 with 22 fatalities; commercial employment, 27,687 with 102 fatalities; clerical and professional, 2,095 with 36 fatalities; care and custody of buildings and grounds, 6,268 with 80 fatalities; public employees, 5,748 with 98 fatalities; agriculture, 1,023 with 20 fatalities; leather and leather goods, 1,206 with 3 fatalities; and miscellaneous industries, 1,161 with 5 fatalities.

"Year after year, this appalling peace-time casualty list is maintained", says Superintendent Thos. P. Kearns of the Division of Safety and Hygiene. "It is more tragic than the horrors of war from the mere fact that it is accepted with such apparent indifference. It brings physical pain and mental anguish to countless thousands, makes steady inroads on the economic status of the workers and figures to such an extent in production costs that every citizen of Ohio should have a vital, personal interest in accident elimination, an end to which the Industrial Commission is constantly striving. The goal set for 1930 is a 25 per cent reduction in accidents and the cooperation of every employer and worker in Ohio will be necessary to attain it."

A preliminary summary of the occupational disease claims filed with the Industrial Commission during 1929 indicates a total of 1,381 claims, an increase of 191 over the preceding year, according to a report published in the *Monitor*, official publication of the Commission.

Seventy-eight of the claims filed were for tenosynovitis which was not on the list of compensable diseases during 1928. As 102 claims were filed for conditions not compensable under the Ohio Workmen's Compensation Law.

In 1929, there were 37 occupational disease death claims filed, compared with 28 during 1928. Ten of these claims were for non-compensable diseases. The remaining death claims were for the following classifications: Dermatitis, 3; lead poisoning, 19; bensol or derivatives, 2; anilin poisoning, 1; volatile petroleum products such as benzine or naphtha, 2. The 10 death claims for non-compensable conditions were filed in the following classifications: Tuberculosis, 3; asthma, 1; bronchitis, 3; some form of poisoning nonpompensable, 2; infections or contagions, 1.

Dermatitis was the classification in which the largest number of claims were filed, having a total of 911. Excluding four death claims in this classification, it was found that the average period of disability or number of days lost was less than 11 days per claim. In many of the dermatitis cases there wes no loss of time and the claims were filed for payment of medical bills.

"As has been indicated there seems to be an increasing tendency to file claims for death awards in many instances in which there is little if any indication that death was the result of an occupational disease," the *Monitor* stated.

"For example, an examination of the death claims attributed to dermatitis shows that of the three claims filed, in one instance death was due to suicide, in another the decedent died as a result of diabetes three years after he received compensation for a short period of disability attributed to dermatitis from oil, while the third claim recently filed is one for investigation. In the same classification there is a claim for permanent total disability in which there was no evidence of a skin disease, but a total loss of

vision which was attributed to tobacco poisoning. This last claim was found non-compensable. These claims are mentioned to show that in many instances the claims filed do not really indicate the existence of an occupational disease or a death as the result of some occupational hazard."

Responsibility for Smallpox Discussed by Health Department

Laxness on the part of some Ohio public officials responsible for seeing that the health laws of the state pertaining to smallpox are enforced and obeyed, and a general attitude of carelessness on the part of the public generally are blamed by state health department officials for the smallpox epidemic which claimed 3223 victims during 1929—a record which placed Ohio among the group of states notorious for their annual prevalence of smallpox cases.

The responsibility for the smallpox situation in Ohio is discussed at length in a recent issue of the *Ohio Health News*, publication of the State Department of Health. In part, this article said:

"The responsibility for this state of affairs must rest, primarily, with the general public, as there is no one who can read or hear who has not seen or heard of the efficacy of vaccination as a preventive of smallpox. Secondarily, the responsibility rests with boards of education, boards of health, and to a lesser degree upon the practicing physician.

"In 1872, the General Assembly of Ohio enacted a statute giving to every board of education in the state the authority to '*make and enforce such rules and regulations to secure vaccination of, and to prevent the spread of smallpox among the pupils attending or eligible to attend the schools of the district, as in its opinion the safety and interest of the public require*'. This law has never been amended or repealed and is now found in the General Code as Section 7686. To aid the board of education in this object the statute placed upon boards of health, municipal councils and the trustees of townships the duty to provide '*at public expense and without delay, * * * the means of vaccination to such pupils as are not provided therewith by their parents and guardians*'. Numerous attacks have been made on this provision of the statutes in the courts of this state, but there has been a uniformity of opinions in all the decisions.

"Many boards of education have adopted rules and regulations as authorized by General Code 7686. In some school districts the regulation requiring vaccination of school children has been and is now enforced with the result that there is no interruption of school work if smallpox appears in the community. In other districts vaccination is only enforced when smallpox appears, notwithstanding the requirement that no child be admitted to school without evidence of successful vaccination or physician's certificate of physical disability. In one school in such a district it was recently found that 480 out of an enrollment of 750 had not been vaccinated. In closing this school 34 per cent of the enrolled pupils were penalized because of the carelessness of the board of education and its employes.

"The responsibility of the board of health begins with the report of a case of smallpox. The case must be quarantined; contacts discovered and vaccinated, or refusing vaccination, be quarantined for 17 days; and other measures taken for the protection of the public. There should be no secrecy about the presence of smallpox in a community.

"Many competent health officials have advocated the abolition of quarantine against smallpox because of the ease and sureness whereby the disease can be prevented, but this has not been seriously considered by public officials in Ohio because of the legal and moral obligation of the state to protect those unable to protect themselves i.e., the simple-minded and the children.

"The responsibility of the physician ceases when he has made an honest diagnosis and report to the health commissioner. Not many present-day physicians wilfully misdiagnose these cases, but this occasionally happens.

"In this day of slogans, it might be said: 'No person need have smallpox unless he wants it'.

Drug Store Business

As evidence of the size and importance of the merchandising problem which retail drug stores are now facing, *Drug Topics* cites the following percentages to show how the two billion dollar drug store business of the country is distributed among the various commodities:

Proprietaries	28%
Soda fountain and candy	20%
Sundries and miscellaneous	18%
Toilet goods	15%
Prescriptions, drugs	14%
Cigars and cigarets	5%

It would seem after a glance at these figures that almost no drug store today can hope to meet real competition unless it is prepared to make a department store and a restaurant out of itself, as well as a place where healing medicines can be purchased.

It is a well known fact that many drug store owners are opposed to making their places of business a source for a long and varied list of commodities, but through the pressure of competition they have been forced to follow this method.

What the final outcome will be is somewhat of a puzzle. Leaders in the retail and wholesale drug field are now struggling with the problem, attempting to work out some rational revision in the present merchandising system. Their ultimate answer to the important questions facing the average retailer will be most interesting.

Deaths in Ohio

Wesley P. Arner, M.D., Fowler; Western Reserve University School of Medicine, 1883; aged 79; died February 14 of cerebral hemorrhage. Dr. Arner had practiced in Fowler and Trumbull county for 47 years. He is survived by one brother and two nieces.

George Griswold Baker, M.D., Cleveland Heights; University of Michigan Medical School, Ann Arbor, 1875; aged 81; died February 2, following a long illness. Dr. Baker was located in Akron until 1888 when he moved to Denver, Colorado. In 1920 he retired from active practice and located in Cleveland. He is survived by his widow and four children.

Robert P. Beggs, M.D., Lakewood; Columbus Medical College, 1888; aged 70; died February 26. He had practiced in Lakewood for 42 years. Surviving him are his widow and one daughter.

Franklin P. Calhoun, M.D., Canton; Western Reserve University School of Medicine, 1885; aged 77; member of the Ohio State Medical Association and Fellow of the American Medical Association; died February 10, following an extended illness. Dr. Calhoun had practiced in Canton for 40 years. He is survived by his widow, one son, and two sisters.

James M. Fry, M.D., Shenandoah; College of Physicians and Surgeons, Keokuk, Iowa, 1882; aged 77; died February 8 at General Hospital, Mansfield. He had practiced for almost half a century in Shenandoah and the northern part of Richland County. Surviving him are a son and a daughter.

Claren S. Miller, M.D., Toledo; Toledo Medical College, 1890; aged 73; died February 7 at St. Vincent's Hospital, Toledo, following a month's illness. He had practiced in Toledo 41 years, and for many years was professor of anatomy and lecturer at the Toledo Medical College. He is survived by two sons and two daughters.

Albert Edward McClure, M.D., Lakewood; Cleveland Medical College, Homeopathic, 1892; aged 59; died February 21 at Cleveland Clinic Hospital following a long illness. Dr. McClure had practiced in Lakewood since his graduation, and for 15 years was county jail physician. Surviving him are a daughter and a son.

John J. Nungesser, M.D., Cleveland; Western Reserve University School of Medicine, 1885; aged 73; former member of the Ohio State Medical Association; died January 28. He had practiced in Cleveland since his graduation, and had served as resident physician at Charity and St. Anne's hospitals, before his retirement several years ago. His widow and one son survive him.

Author Howard Rine, M.D., Toledo; Ohio Medical University, Columbus, 1901; aged 55; member of the Ohio State Medical Association and the American Medical Association; died February 14 at St. Petersburg, Florida. Dr. Rine formerly practiced in Newark and in Walbridge, Wood County, before locating in Toledo several years ago. He is survived by his widow.

Vine H. Tuttle, M.D., Madison; Medical College of Indiana, Indianapolis, 1894; aged 61; member of the Ohio State Medical Association and Fellow of the American Medical Association; died February 19 at Lake County Memorial Hospital, Painesville, of heart disease. Dr. Tuttle was a veteran of the Spanish American War. He practiced in Bloomfield and Orwell before locating in Madison 17 years ago. Surviving him are his widow and one daughter.

Alfred P. Scully, M.D., Cleveland; Trinity Medical College, Toronto, Ontario, 1899; aged 57; member of the Ohio State Medical Association and the American Medical Association; was found shot and beaten to death in his office on March 3, by Dr. F. Wood, when he rushed in after hearing a call for help. Dr. Scully had practiced in Cleveland since 1900.

Walter E. Smith, M.D., Columbus; Ohio State University, College of Medicine, 1924; aged 36; died March 4 of a fractured skull, when his automobile crashed into a telephone pole. It is believed Dr. Smith suffered a heart attack, causing the car to run uncontrolled into the pole. Dr. Smith had served his internship in Mt. Carmel Hospital, and was a veteran of the World War. He is survived by his widow, one daughter, his parents, two brothers and three sisters.

William Lewis Werner, M.D., Akron; Eclectic Medical College, Cincinnati, 1901; aged 61; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 8. Dr. Werner had practiced in Akron for many years, and had been a member of the Summit County Medical Society since 1917. He is survived by a brother, Dr. H. R. Werner.

Automobile Deaths Increase in Ohio

Automobiles in Ohio during the year 1929, took the lives of 2269 persons, a gain of 12.5 per cent over the fatality toll of 2016 in 1928, according to records of death filed with the State Department of Health, Division of Vital Statistics. During the past twenty years, 17,121 persons lost their lives as a result of automobile accidents.

The registration of automobiles has increased almost 5000 per cent during the same period of time, and the deaths have increased more than 2700 per cent. If Ohio had not had an epidemic of influenza and whooping cough during 1929, automobile mishaps as a cause of death would have shown the largest increase during last year. The four causes of death showing the greatest increase were: Influenza 655 more; whooping cough, 278; automobile fatalities, 253; and diseases of the heart taking fourth place with 236.

An alarming fact brought out by the compilation of the data shows that there has been an increase of 150 per cent in the number of deaths of children under 10 years of age from automobile accidents during the past twenty years.

The most encouraging feature of the information compiled shows one death for every 412 automobiles registered in 1910, while today there is one death for every 948 automobiles.

During the past six years, 1111 persons have been killed at grade crossings while riding in an automobile. In 1924, 113 were killed, and the number increased until 1927, when 231 were killed. Since that date there has been a decrease and for the year 1929, 201 persons were killed by railroad trains at grade crossings. A total of 459 persons lost their lives while riding in an automobile struck by a street car or interurban during the past six years, this being an increase of 62 per cent since 1924, when 63 deaths were reported, as compared with 102 in 1929.

Ohio's greatest tragedy from deaths due to interurban accidents in connection with an automobile, occurred on January 22, 1929, near Bellevue, when 20 passengers on a bus were killed at an interurban crossing.

The number of deaths in 1929 due to automobiles, exclusive of railroad trains, street cars and interurban accidents, was 1965 with a rate of 29.18, as compared to 1730 for 1928 with a rate of 24.29 per 100,000 population.

The original certificate of death gave the place of the accident on 1676 records, being 735, or 37 per cent in the rural district, 941, or 47 per cent in the urban district, and 289, or 16 per cent, the place of the accident not given. In 468 of the records it was shown whether the person killed was a pedestrian, driver or passenger, 72 per cent of this number being pedestrians, 18 per cent passengers in an automobile, and 10 per cent drivers.

The information compiled as to the means or manner of the accident was secured on 45 per cent of these certificates, there being 127 fatalities caused by the automobile upsetting along the highway from excessive speed, slippery highway, cutting in and approaching bright lights, and other means; 74 fatalities from collisions of automobiles on the highway; 40 from collisions in the city; 31 from inhaling carbon monoxide gas; 463 run down by an automobile at street intersections, walking along the highway, and stepping from behind automobiles or other objects; 39 running into a fixed object; 5 cranking an automobile; 107 in connection with trucks and buses.

New State Hospital Additions

Work on additions to several state hospitals for the mentally afflicted and remodeling of several others have been ordered speeded up by Governor Cooper to alleviate unemployment in Ohio.

State building projects, totaling approximately $2,500,000, were authorized by the last legislature. Work on some of the projects has already begun. Contracts for the balance will be awarded as soon as possible and construction started immediately.

Listed among the projects are the following:

First unit of new Institution for Feeble-Minded, Apple Creek, $400,000. Contract for the second unit will be awarded about May 1.

Cottage at Gallipolis Hospital for Epileptics, $125,000.

Cottage at Massillon State Hospital, $125,000.

Power house and tuberculosis hospital at Longview State Hospital, Cincinnati, $275,000.

Remodeling Longview State Hospital, $40,000.

Further steps in the state's program to provide Southwestern Ohio with an institution for feeble-minded were taken recently when State Welfare Director Griswold announced that the state had purchased for $200,000 a 2000-acre tract near Lebanon, formerly a part of the Otterbein Farm of the United Brethren Church.

An option was taken on the site in 1928, but purchase was delayed until engineers could check up on the water supply and other details, to see if the tract was suitable as a site for a state institution. Work will be started at once, Mr. Griswold announced, on remodeling the farm buildings to accommodate patients from the Longview State Hospital who will operate the farm.

Expansion of the initial building program for the new state institution for feeble-minded at Apple Creek to acocmmodate 950 patients has been authorized by the State Board of Control. The original program called for accommodations for only 450 patients. Four cottages instead of two will be erected, in addition to a power house and laundry. The Board made available $400,000 additional funds for the enlarged program.

NEWS NOTES of OHIO

Dayton—The following Montgomery County physicians have offered to cooperate with the Officers Reserve Corps in obtaining recruits for the 1930 Citizens' Military Training Camps: Drs. E. E. Bohlender, Roscoe R. Bond, C. C. Borden, Homer D. Cassel, E. B. Doan, Curtiss Ginn, Charles T. Hunt, P. A. Kemper, H. F. Koppe, Thomas L. Laughlin, William F. Lauterbach, H. C. Mondhenk, H. E. Palmer, H. H. Pansing, A. O. Peters, F. V. Riche, Mack M. Shafer, H. A. Slusser, Henry Snow, Oscar H. Stuhlman, J. D. Varney, W. V. Weaver and R. L. Woodruff.

Middletown—Dr. W. H. Henry, colonel in the medical reserve corps, was elected president of the Butler County chapter of the Officers Reserve Corps Association.

Cleveland—Dr. R. A. Bolt has been notified of his appointment to a sub-committee on maternal mortality of the White House Committee on Child Health and Protection.

Ashtabula—Members of the Ashtabula County Medical Society entertained their wives recently at a dinner dance at the Hotel Ashtabula.

Bellevue—An illustrated talk on the use of *X*-rays in diagnosis was given recently by Dr. H. K. Shumaker at a dinner meeting of the Foremen's and Apprentice Club of the Ohio Cultivator Company.

Cincinnati—A lecture on the work of the late bacteriologist, Hideyo Noguchi, was delivered recently by Dr. Gustav Eckstein, of the faculty, University of Cincinnati, College of Medicine, before a meeting of the local chapter of Sigma Xi, scientific society.

Lorain—Dr. Otto Mikolando, city jail physician for the past 10 years, has resigned because of ill health. Dr. H. F. Ross was named his successor.

Cleveland—Dr. B. H. Nichols, Cleveland Clinic, delivered an essay on "Diseases of the Kidney" before a recent meeting of the New York Academy of Medicine.

Barnesville—Dr. F. H. Stoup has opened an office in Hendrysburg which has been without the services of a physician since the death of Dr. C. L. Rosengrant.

Athens—Dr. John H. Berry, head of the Athens State Hospital, has been re-elected president of the Ohio Managing Officers Association.

Wooster—Many friends of Dr. J. H. Todd called on him recently when he celebrated his 93rd birthday. He has been practicing medicine for 65 years.

Cincinnati—Dr. A. H. Freiberg, president of the Ohio State Medical Association, was among those scheduled to address the annual meeting of the International Society for Crippled Children at Toronto.

Canton—"Ted" Robinson, columnist on the Cleveland Plain Dealer, addressed the annual banquet of the Canton Medical Library Society on "What I Know About Doctors". The banquet was in charge of the trustees, including Drs. J. E. Shorb, chairman, E. S. Folk, F. E. Hart, Charles A. LaMont, F. S. Van Dyke and Herman Welland.

McConnelsville—Dr. Frank Laude, formerly of Denver, Colorado, has joined the staff at the Rocky Glen Sanitorium.

Cambridge—Many members of the medical profession attended services at the First Baptist Church when Rev. T. D. Rees preached on the subject, "The Man Who Feels Your Pulse".

Washington C. H.—County Commissioners have employed Dr. L. L. Brock as county home physician.

Cleveland—Dr. V. C. Myers recently addressed the Indianapolis Academy of Medicine and the student body of the School of Medicine, University of Indiana.

Cleveland—An address on "Eye Injuries" was made recently by Dr. W. P. Chamberlain before the compensation law group of the American Plan Association.

Cleveland—Dr. T. Wingate Todd has been named on the editorial board of "Child Development" a new scientific journal.

Cleveland—Dr. R. C. Engel has been named chairman of the Health Committee of the Metals Section of the National Safety Council.

Cleveland—Drs. John Dickenson, Maxwell Harbin, E. J. Brown, O. A. Weber and J. A. Dickson have been named to represent the Cleveland district in a hospital survey to be conducted by the American College of Surgeons on the subject of fracture treatments.

Conneaut—Dr. Charles C. Eades has moved to Detroit where he will engage in general surgery.

Cleveland—Dr. Gerald S. Shibley, assistant professor of medicine at Columbia University, will join the faculty at the School of Medicine, Western Reserve University, July 1, as an associate professor.

Piqua—City Manager L. G. Whitney has named Dr. John F. Hill, former president of the Maimi County Medical Society, assistant city health commissioner.

Massillon—Dr. John H. Cooper has returned from Vienna where he took a six-months postgraduate course.

Lorain—A talk on cancer was given before the Lorain Kiwanis Club by Dr. W. E. Wheatley.

Delaware—Dr. E. D. McCallister sustained a badly injured back when the automobile he was driving was crowded off the road north of Delaware and turned over.

Toledo—The Toledo Academy of Medicine sponsored a clinical tour to Chicago, March 20 and 21.

Alger—Dr. Earl Craft has accepted a position on the staff at the Lima Hospital for the Criminal Insane, leaving Alger without a physician.

Forest—Dr. W. H. Rabberman is undergoing treatment at a Toledo hospital.

West Jefferson—Dr. J. W. Hurt, formerly of Columbus, will occupy the offices formerly occupied by the late Dr. G. M. Kerr.

Cleveland—Construction work on a new $400,000 building to house the Cleveland Clinic, damaged by an explosion and fire last May, will be started soon, Dr. George W. Crile, president of the Clinic, has announced.

Columbus—Dr. Charles E. Turner has presented the new Circleville hospital with an incubator for its obstetrical ward.

PUBLIC HEALTH NOTES

—Reports received by the State Department of Health indicate that Ohio's smallpox epidemic is on the decline. Since October 1, there have been 3147 cases reported. During February 642 cases were reported, the weekly average on March 1 standing at 168, compared to a weekly average of 181 for the 10 weeks prior to February 1.

—Ohio's immunization campaign against diphtheria has produced results which seem to be unequalled anywhere in the country, according to the *Ohio Health News*, publication of the State Department of Health. Ohio's diphtheria death rate in 1929 was 3.34 per 100,000 population compared to 5.56 in 1928 and the case rate was only 46.5 as against 73.1 in 1928.

—Dayton has been selected as the place of meeting of the 1930 Conference on Sewage Treatment. The meeting will be held on October 16 and 17. The Ohio Conference on Water Purification will be held in conjunction with the sewage conference.

—Measles continued to be one of the chief baby killers in Ohio, the State Department of Health concludes after a review of the mortality statistics for 1929. Last year there were 238 deaths from measles, 225 from diphtheria, 149 from scarlet fever and three from smallpox.

—Dr. M. D. Gamble has been appointed a deputy health commissioner and district physician by the Columbus Board of Health, succeeding Dr. R. B. Lawyer, resigned.

—Dr. W. C. Corey, who is retiring from the office of Lake County health commissioner, was honored by a dinner given by the public health nurses of the county.

—The United States Public Health Service is contemplating making Cleveland a special registration area to gather statistics on communicable diseases, Health Commissioner Rockwood, Cleveland, has announced.

—Compulsory vaccination against smallpox and legal requirement of medical examination prior to marriage were advocated by Dr. Andy Hall, health director of Illinois in a recent address.

—Negro infant mortality rates, in every area recently studied, were higher than the corresponding rate for white infants, according to a recent study of the U. S. Public Health Service.

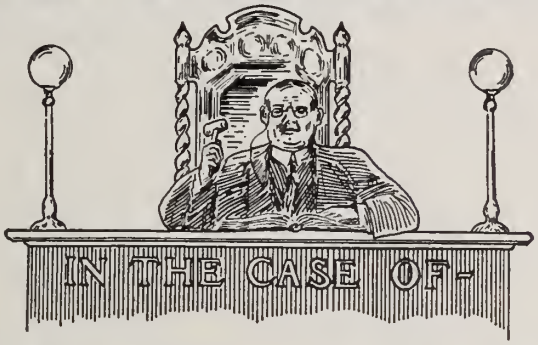
—The alcoholism death rate among wage earners during the past eight years has been six times as great in the United States as in Canada, according to statistics compiled by the Metropolitan Life Insurance Company. During the eight-year period there were among the industrial policyholders of the company 4138 deaths from alcoholism of which 4087 occurred in the United States, compared to 48 in Canada.

—An all-day meeting of the Central District Health Commissioners' Association was held March 19, at the Neil House, Columbus. Among the speakers were Dr. N. Sifritt, Marion, city health commissioner, who spoke on "Smallpox Vaccination in Public Schools", and Dr. J. H. J. Upham, dean of the College of Medicine, Ohio State University, who discussed the subject, "The Health Officer as a Specialist". Reorganization of the association as a district of the Ohio Society of Sanitarians took place during the business session. A question-box was conducted by Dr. C. A. Neal, director of the State Department of Health.

The A. M. A. Meeting

Ohio physicians who are planning to attend the annual meeting of the American Medical Association, to be held June 23-27 at Detroit, Michigan, are advised to engage hotel accommodations in Detroit as early as possible. Detroit is well supplied with first-class hotels but prompt reservations should be made to insure desirable locations.

In the March 1, 1930 issue of the *A. M. A. Journal*, page 44, may be found a list of Detroit hotels with their rates. The method to be followed in reserving rooms is explained in the announcement.



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HOSPITAL NOTES

—Mt. Sinai Hospital, Cleveland, has announced the appointment of the following chiefs of departments: Surgery, Dr. M. E. Blahd; urology, Dr. P. A. Jacobs; gynecology, Dr. J. L. Bubis; medicine, Dr. S. S. Berger; mental hygiene, Dr. G. H. Reeve; obstetrics, Dr. Moses Garber; orthopedics, Dr. Walter G. Stern; ear, nose and throat, Dr. Adolph Steiner; eye, Dr. Leo Wolfenstein; pediatrics, Dr. J. W. Epstein; oral surgery, Dr. M. B. Galvin.

—It has been announced that within the next few years Charity Hospital, Cleveland, will add $500,000 worth of buildings to the present one.

—The Portsmouth City Board of Health has suggested to City Council that it take over the operation of the new contagious disease hospital and that it be placed under the direction of the City Hospital superintendent.

—Miss Ethel Reeser, formerly connected with the Cincinnati General Hospital, has accepted the position of superintendent of the Ironton Deaconess Hospital. She succeeds Miss Effie Conway.

—Miss Grace Anderson, formerly of Detroit and Muskegon, Michigan, has taken charge of the new pathology department of the Marion City Hospital. Equipment for the unit is now being selected.

—A committee composed of Drs. Richard Henderson, Mark Houston and L. A. Woodburn of the Champaign County Medical Society is working with the county commissioners relative to plans for enlarging the present Champaign County Hospital.

—New directors of the Mercy Hospital Association, Tiffin, include Drs. R. F. Machamer and E. H. Porter.

—Miss Melissa M. Dailey, formerly of Lancaster and Delaware, has been appointed superintendent of the new Circleville hospital.

—The following active and inactive staff members have been announced by the Mansfield General Hospital: Active staff members, Drs. W. D. Abrams, L. Adams, A. C. Biddle, R. R. Black, C. G. Brown, E. C. Brown, C. R. Damron, G. T. Goodman, C. R. Keller, D. C. Lavender, W. P. Mecklem, J. F. Morey, R. V. Myers, H. L. Meckstroth, J. H. Nichols, L. C. Nigh, O. H. Schettler, S. C. Schiller, G. J. Searle, Jr., C. L. Shafer, B. E. Shreffler, Geo. C. Smith, L. A. Smith, W. A. Smith, J. L. Stevens, D. R. Talbot, Harro Woltmann, J. M. Garber, R. C. Wise and D. W. Peppard. Inactive staff members: Drs. W. S. Bushnell, M. J. Davis, S. E. Findley, J. A. Yoder, P. A. Stoodt, J. E. Gray, J. S. Hattery, C. E. Hunter, I. H. LeBarre, W. E. Loughridge, F. A. McCullough, W. E. Young, W. E. Wygant, W. H. Buker, G. W. Miller and K. G. Parker.

—Dr. E. A. Wagner, chief of staff of Good Samaritan Hospital, Cincinnati, has announced the following appointments: Members of the medical executive board, Dr. Wagner, Dr. Ralph Carothers, vice president; Dr. Clifford Straehley, secretary; Dr. Edward King, Dr. John D. Miller and Dr. Oscar Berghausen, and the following committee executives; Interns, Dr. E. O. Smith; records, Dr. L. B. Johnston; Dr. George Renner and Dr. William Topmoeller; nursing, Dr. George B. Topmoeller and Dr. Edward King; laboratory and technique, Dr. Ralph Carothers, Dr. Joseph L. DeCourcy, Dr. M. L. Cooper and Dr. E. A. Schleuter; program, Dr. Eslie Asbury.

—Ground has been broken for the new nurses' building at the Cincinnati Jewish Hospital, the first unit in the $1,500,000 building program made possible by public subscription.

—Damage from the recent fire in the nurses' home of St. Alexis Hospital, Cleveland, has been estimated at $2500.

—Five Cincinnati hospitals received bequests totaling $15,000 by the will of the late Judge J. A. Runyan, Lebanon. They are: Children's Hospital, $5000; Bethesda Hospital, $2500; Good Samaritan Hospital, $2500; Jewish Hospital, $2500 and Christ Hospital, $2500. The Miami Valley Hospital, Dayton, also was given $2500.

—John G. Benson, superintendent of White Cross Hospital, Columbus, in an address to the Parent Teacher Associations of Franklin County declared that "less talk about the high cost of sickness and more about the high cost of health, which is worth every penny it costs, is good economic sense" and that "the human cry about expensive sickness is but the wail of ingratitude of people who want their health for nothing".

—Hospital expenses have increased more than 100 per cent in the last decade, while the charge made to patients has increased only 33 per cent, J. A. Diekman, superintendent of Bethesda Hospital, Cincinnati, declared in his annual report to the Board of Managers. The staff of the hospital was organized by election of Dr. F. D. Phinney as chief of staff; Dr. C. S. Amidon, vice president, and Dr. Charles E. Eha, secretary-treasurer. Dr. John A. Caldwell was named to the surgical staff and Dr. E. V. Stewart to the anesthetist staff. Dr. Thad Gillespie was promoted from the junior to the senior obstetrical staff. New men appointed to the junior staff were: Drs. L. M. Buckner, Paul D. Grove, William Gillespie, Herbert P. Lyle, H. G. Nelson, Byron H. Nellans and R. E. Raitz. Physicians reelected to the senior staff were:

Senior Staff—Doctors C. S. Amidon, O .Berghausen, C. W. Betzner, E. R. Bader, C. H. Burmeister, B. N. Carter, E. M. Craig, V. B. Dalton, J. A. Davis, D. J. Davies, C. E. Eha, William L. Freyhof, H. P. Fischbach, Victor Fischbach, A. W. Foertmeyer, C. E. Geiser, W. J. Graf, Walter R. Griess, George Holt, J. S. Hagen, C. C. Jones, W. C. Kendig, M. F. McCarthy, J. R. McCleary, F. H. Miketta, William D. Por-

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PROMPT AND FULL REPORT

ter, F. D. Phinney, Lincoln Phillips, George E. Rockwell, E. B. Shewman, E. O. Smith, W. H. Smith, E. O. Swartz, C. T. Souther, E. B. Snyder, A. R. Walker, H. H. Wiggers, Karl G. Zwick.

Junior Staff—Doctors A. Harry Crum, R. L. Crudgington, Frederick A. Fischer, Joseph N. Ganim, D. W. Heusinkveld, A. Ralph Kuhn, J. Stewart Mathews, J. H. McLachlin, J. W. McCammon, Horace W. Reid, Clifford J. Straehley, C. E. Wooding, Paul Woodward.

Directors of Departments are: Dr. E. B. Shewman, Surgery; Dr. E. B. Snyder, Medical; Dr. J. A. Davis, Obstetrics; Dr. H. P. Fischbach, Gynecology; Dr. J. R. McCleary, Eye, Nose, Throat; Dr. M. F. McCarthy, Ear; Dr. E. B. Snyder, Children's Hospital; Dr. W. R. Griess, Orthopedics; Dr. E. O. Swartz, Urology; Dr. C. H. Burmeister, Dental Surgery; Dr. A. W. Foertmeyer, Neurology; Dr. Karl G. Zwick, Dermatology; Dr. E. R. Bader, Radiography; Dr. O. Berghausen, Pathology Dr. E. V. Stewart, Anesthesia.

—The Lewis Nurses' Home of the Ashtabula General Hospital has been dedicated.

—City Council of Bellefontaine has authorized the expenditure of $40,000 to build a third floor to the Mary Rutan Hospital and erect a nurses' home.

—Nurses' Alumnae Association of Glenville Hospital, Cleveland, has contributed $500 toward new buildings for the institutions. A campaign for $500,000 is now under way.

—The financial campaign for Jane Case Hospital, Delaware, has officially ended with a total sum of $102,358 reported.

—Members of the board of the Greenville Hospital have announced that a sum of $1750 still is needed to equip and furnish the $40,000 addition to the institution.

—Plans for construction of a $1,475,000 hospital at the National Military Home, Dayton, are expected to be completed by April 1.

—Mahoning County Commissioners have been asked to build a psychopathic unit to the Youngstown Hospital instead of voting funds for the erection of a county psychopathic hospital.

—One-half of the $100,000 in stock to be sold for the erection of a hospital at Barnesville has been sold.

—Children's Hospital of Columbus has been named residuary legatee of the $95,000 estate left by the late William M. Frisbie.

—Cleveland City Council has been requested to issue $350,000 in bonds for the construction of an East-side branch of the Cleveland City Hospital.

——Fulton County's new hospital at Wauseon has been dedicated. The 50-bed structure was erected at a cost of $300,000.

—The new $40,000 north wing to the Greenville Hospital will be completed within a month. It will add 14 beds to the institution.

—The New York Polyclinic Medical School and Hospital will erect a ten-story building for an out-patient department, transferring the clinical space in its present building to the new building, thereby enlarging its wards to take care of another 150 ward patients for teaching purposes.

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News Notes From County Societies and Academies

First District

ACADEMY OF MEDICINE OF CINCINNATI
(Edward King, M.D., Secretary)

February 24—Regular meeting of the Academy at the Chamber of Commerce. Program: "Pneumonia in Children", by Dr. Edward Wagner; "Pneumonia in Adults", by Dr. Leon Schiff.

March 3—Program: "The Tonsil—Pathological and Clinical Aspects", by Dr. Ben L. Bryant.

March 10—Program: "Diabetes", by Dr. Henry J. John, of Cleveland.—Bulletin.

Second District

Greene County Medical Society met at the Iron Lantern, Xenia, on Thursday, March 6. A luncheon followed the program, which consisted of several case reports, and a talk by Mr. Louis Hammerle, superintendent of Xenia schools, which dealt with the methods employed by school authorities in checking up on the cause of children being absent from school. Mr. Hammerle asked the cooperation of the society in this work, in an effort to check the spread of epidemics.—News Clipping.

Miami County Medical Society held its March meeting at Memorial Hospital, Piqua, on Friday afternoon, March 7. The program, which consisted of motion pictures, included two scientific pictures presented by the Petrolagar Company, on "The Influence of Drugs on Gastro-Intestinal Motility", and "The Anatomy of the Abdominal Wall", and a film taken by Drs. Bausman and Trowbridge on their recent hunting expedition in Mexico.—Bulletin.

Montgomery County Medical Society met Friday evening, February 21 in the Fidelity Medical Building, Dayton. The program consisted of a symposium on "The General Physician", with the following speakers: Drs. E. E. Bohlender, George Goodhue, Webster Smith and T. E. Newell.

On Friday evening, March 7, the Society held a dinner meeting at the Dayton State Hospital, with the Hospital Staff as hosts. Following the dinner, Mr. H. H. Griswold, director of the State Department of Public Welfare, Columbus, addressed the members on "Some Welfare Problems for the Doctors".—Bulletin.

Shelby County Medical Society met Friday evening, February 7 in Sidney. A very interesting and instructive paper was presented by Dr. M. F. Hussey on "Acute Pancreatitis", with citation of two cases, and a very thorough resume and history of the cases with the treatment given. A general discussion followed with every one taking part. At the close of the paper and discussion, Dr. Reddish stated before the Society

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District No. 9—1930 Robinwood Ave., Apartment 40, "The Scotwood," Toledo, Ohio. Phone: Main 7962
District No. 12—398 N. Garfield Ave., Columbus, Ohio. Phone: Franklin 1234
District No. 15—Portsmouth General Hospital, Portsmouth, Ohio. Phone: 559

that it was the best, most painstaking, and thorough paper that he has had the pleasure of hearing for years. All agreed to the statement and passed a vote of thanks to Dr. Hussey for his work.

The regular meeting of the Society, held Friday afternoon, March 7, in the Chamber of Commerce Rooms, Sidney, was addressed by Dr. V. W. LeMaster, who gave a very interesting and instructive paper on "Encephalitis", in report of a case which was thoroughly discussed by all of the members present.—B. S. Stephenson, Secretary.

Third District

Logan County Medical Society met Friday evening, February 7, at Hotel Ingalls, Bellefontaine. "Diagnosis and Treatment of Pneumonia" was the subject of a paper presented by Dr. J. L. Maurer, of West Liberty. Supplementary talks were given by Dr. W. H. Carey and Dr. Robert B. Pratt, and a general discussion was participated in by members present. Moving pictures showing views of the intestinal tract, were shown. The program was preceded by a dinner. —News Clipping.

A testimonial dinner was given by the Society, at Hotel Ingalls, on Monday evening, March 3, in honor of Dr. Ben S. Leonard, of West Liberty, who has completed fifty years of medical practice. Dr. J. P. Harbert, president of the Society, on behalf of the entire society presented a handsome leather traveling bag to Dr. Leonard, who responded with expressions of his appreciation. Arrangements for the banquet were in charge of Drs. A. J. McCracken, M. L. Pratt, and Arthur H. Corliss. The toastmaster, Dr. Harbert, provided an opportunity for all those present to speak. Among guests present were Mr. William T. Haviland, president of the Board of Trustees of Mary Rutan Hospital, Mr. Garfield March, and Mr. Max Leonard, a brother of the honor guest.—News Clipping.

Fourth District

TOLEDO ACADEMY OF MEDICINE

(A. P. Hancuff, M.D., Secretary)

March 7—General Meeting. Program: "Fetal Liver Feeding in Aplastic Anemia, with Case Report", by Dr. J. H. J. Upham, Columbus, Dean, Ohio State University College of Medicine. Buffet supper at the University Club.

March 14—Section of Pathology, Experimental Medicine and Bacteriology. Program: "Experimental Studies in Carbon Monoxide Poisoning", by Dr. Thomas L. Ramsey; "Metastatic Endothelioma from a Nevus", Case Report. Dr. N. W. Gillette, "Collapsed Lung in the New Born", Case Report. Dr. J. S. Teter.

March 28—Surgical Section. Program: "Fractures of the Pelvis with and without Complications", by Dr. T. H. Brown; "Report of Four Unusual Urological Cases", by Dr. J. A. H. Magoun; "Traumatic Rupture of Liver with Recovery", by Dr. H. B. Meader.

The Medical Section, cancelled its meeting for March 21 because of the Chicago Clinical Tour, March 20 and 21, which was sponsored by the Tour Committee under the chairmanship of Dr. L. I. Clark.—Bulletin.

Fifth District

ACADEMY OF MEDICINE OF CLEVELAND

(Claude D. Waltz, M.D., Secretary)

March 7—Clinical and Pathological Section, meeting at Charity Hospital. Program: "Exophthalmic Goiter and Parkinson's Disease", Dr. E. P. Neary; "Sarcoma of Spleen", Dr. John Dickenson; Presentation of Surgical Cases, Dr. O. A. Weber; Presentation of Medical Cases, Dr. F. C. Oldenburg; Presentation of Orthopedic Cases, Dr. T. A. Willis; Presentation of Pediatric Cases, Dr. W. M. Champion; Presentation of Dermatological Cases, Dr. C. L. Cummer.

March 12—Pediatric Section, meeting at Babies and Children's Hospital. Program presented by the staff.

March 14—Experimental Medicine section. Program arranged by the Department of Pharm-



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March 19—Industrial Medicine and Orthopedic Section. Program: Symposium on Disabilities of the Knee.

March 21—Regular Academy Meeting. Program: "The Inter-acinal Epithelium of the Thyroid Gland", Dr. Alan R. Moritz; discussion opened by Dr. Allen Graham; "The Surgical Significance of Tests of Hepatic Excretion", by Evarts A. Graham, M.D., Sc.D., LL.D., St. Louis, Professor of Surgery at Washington University. Discussion opened by Elliott C. Cutler, M.D.,— Bulletin.

Ashtabula County Medical Society held its annual banquet at Hotel Ashtabula on Tuesday evening, February 25, with forty members present. Following the dinner, an interesting address was given by Attorney D. F. Dunlavy, of Ashtabula. Dancing and bridge took up the balance of the evening and every one present enjoyed this annual affair.—William Millberg, Secretary.

Lorain County Medical Society met Tuesday evening, March 11, at Hotel Newell Restaurant, with members of the Lorain County Dental Society as guests. Following the five o'clock dinner, Dr. Matthew Luckiesh, Director of Lighting Research of the National Lamp Works, Cleveland, spoke on the new sun lamp.—Bulletin.

Sixth District

Mahoning County Medical Society held its regular meeting at the Youngstown Club, on Tuesday evening, February 18. The guest speaker was Dr. Irving W. Potter, of Buffalo, New York, who gave illustrated talks on "Technique of Elective Version", and "Immediate Repair of Birth Canal Injuries". Following the meeting, a buffet lunch was served.

The annual banquet of the Society was held at the Youngstown Club, on Thursday evening, March 13. The principal address was given by William Ganson Rose of Cleveland. The program of entertainment also included Charlie Leedy, of Youngstown, radio entertainer and humorist; acts from Keiths, and orchestra.—Bulletin.

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Portage County Medical Society met at the home of Dr. L. W. Prichard, Ravenna, on Thursday evening, March 6. The program included an address on "The Electrocardiograph in Clinical Medicine", by Dr. Edward W. Parsons, Cleveland, and an illustrated talk on "Hordes of Invading Insect Pests", by Professor E. R. Van Leeuwen, Assistant Entomologist, U. S. Department of Agriculture, and an instructor in the Davey Tree Expert School in Kent.—E. J. Widdecombe, Secretary.

Richland County Medical Society met Thursday evening at the Mansfield-Leland Hotel, Mansfield, for its regular meeting. Dr. Verne A. Dodd, of Columbus, addressed the society on "Some Phases of the Operative Treatment of Fractures." The meeting, which was called for 5:00 P. M., was concluded with a dinner.—Bulletin.

Stark County Medical Society held its regular meeting on Tuesday evening, March 11, in the Medical Library Room, Canton. "Physique and Constitution in Relation to Disease Conditions" was the subject of an address by Dr. J. D. O'Brien. A moving picture demonstrating the surgical treatment of peptic ulcers was presented by Bowman Brothers Drug Company. Following the meeting, a luncheon was served at the Open Door Club, through the courtesy of the Women's Auxiliary and Bowman Brothers Drug Company. —Bulletin.

Summit County Medical Society met on Tuesday evening, March 4 at the Akron City Club. "Surgery of the Handicapped Patient" was the subject of an address by Dr. W. D. Johnson, Batavia, New York, chairman of the Surgical Section of the Medical Society of the State of New York.—Bulletin.

Seventh District

Coshocton County Medical Society held its regular meeting at the City Hospital, Coshocton, on Thursday evening, February 27. Dr. J. W. Shaw presented an interesting paper on "Cancer", which was discussed by members in attendance. —News Clipping.

Jefferson County Medical Society held a dinner meeting on Friday evening, February 28 at the Nurses' Home of the Ohio Valley Hospital, Steubenville. Dr. Sidney A. Chalfant of Pittsburgh, presented a very interesting and instructive paper on "Carcinoma of the Fundus of the Uterus". Discussion by Dr. A. E. Weinstein and Dr. Carl Goehring followed.—M. H. Rosenblum, Secretary.

Tuscarawas County Medical Society met at the City Hall, Dover, on Thursday evening, February 13, with an attendance of 25 members. "The Place of Medicine in Warfare" was the topic of discussion opened by Dr. J. W. Calhoon, Uhrichsville, president, and Dr. W. W. H. Curtiss, of Dennison, who related their experiences during

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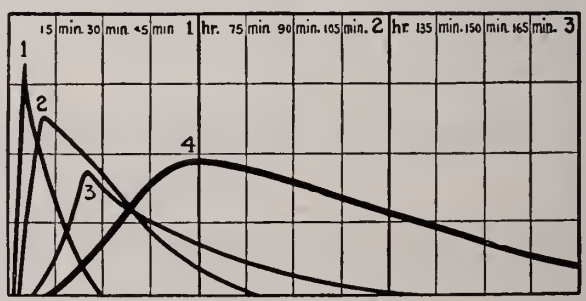
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the World War. Others who gave short talks included Drs. Max Shaweker, Earl Shaweker, Edgar Davis, of Dover, and Dr. A. H. Syler of Sugarcreek.—News Clipping.

Eighth District

Athens County Medical Society held its regular meeting on Monday, March 3, at Nelsonville Dr. M. E. Fulk, Philo, as first speaker, discussed the subject, "Why Standardization in Industry: Its Meaning and Application to Measurements of the Human Body". Dr. J. L. Webb of Carbon Hill, spoke on "Thromboangitis Obliterans", (Buerger's Disease). Lunch was served by the ladies of the Presbyterian Church.—A. L. Pritchard, Correspondent.

Fairfield County Medical Society met Friday noon at the Florentine Lunch Room, Lancaster for its regular meeting. An interesting talk on "Fractures" was presented by Dr. C. D. Hoy, of Columbus. Twenty members were present.—News Clipping.

Guernsey County Medical Society held its regular meeting at the Romance restaurant, Cambridge, on Thursday noon, February 20. Following the luncheon, Dr. Gordon Lawyer addressed the society on "Current Medical Events."—News Clipping.

Muskingum County Academy of Medicine met Wednesday evening, March 5 in Zanesville, for its regular monthly meeting. Dr. J. C. Crossland presented a case report of a man, aged 57, good health, stricken at 8 or 9 p. m., attended by repeated clonic convulsions, with lucid intervals; terminating fatally at 3:30 a. m. Presented with a view of securing clinical differential diagnostic opinions as to cause of death.—Bulletin.

Perry County Medical Society held its regular monthly meeting at the Park Hotel, New Lexington. on Monday, March 17, with a noon luncheon. The guest speaker was Dr. E. J. Stedem, Columbus, who spoke on "The Surgical Consideration of Jaundice."—Bulletin.

Ninth District

Lawrence County Medical Society held a dinner meeting at Hotel Marting, Ironton on Thursday evening, February 27, as guests of Dr. G. G. Hunter, president of the Society. Guests included Dr. Guthrie of Huntington, West Virginia.—News Clipping.

Scioto County—The regular meeting of the Hempstead Academy of Medicine was held Monday evening, March 10 at the Recreation Hall, Nurses' Home, Portsmouth. Dr. Charles E. Howard, of Cincinnati, presented a paper on "Rectal Hemorrhage", which was followed by general discussion. At the close of the program a buffet lunch was served.—Bulletin.

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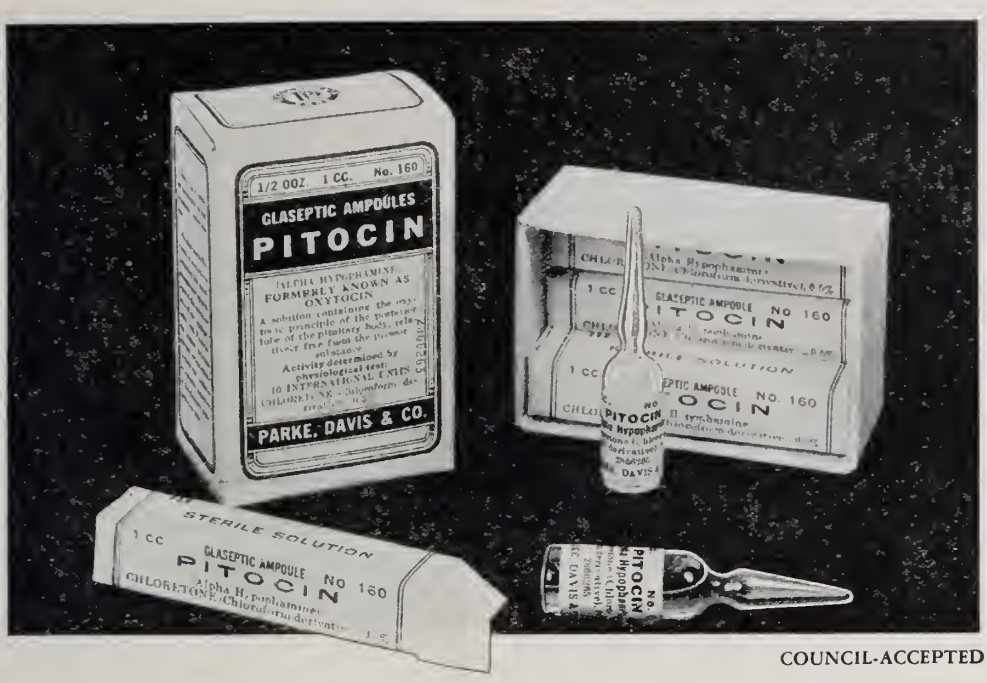
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Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

February 17—Regular meeting of the Academy at the Public Library. Program: "Dermatoses from Pus Organism", by Dr. Charles J. Shepard, with discussion opened by Drs. Frank F. Schmidt and Frank T. Gallen; obstetrical side by Dr. H. W. Koerper; "Influence of the Mind upon the Body", by Dr. C. O. Probst, with discussion opened by Drs. G. T. Harding, Jr., and E. E. Gaver.

February 24—Case Reports: Cyst Involving the Clavicle and Ribs; A Case of Madelung's Disease; Infectious Epiphysis Coracoid Process; Pott's Abscess, *X*-ray Plates, by Dr. A .M. Steinfeld; Agranular Cytic Angina, by Dr. L. N. Jentgen; Coronary Occlusion with Recovery, Dr. W. E. Masters; A Case of Gallstones in the Duodenum, Dr. Paul Scofield.

March 3—Regular meeting at Starling Loving University Hospital. Medical, Surgical, Ophthalmologic Clinic and Pathologic Demonstration, by Drs. Dodd, Beatty, Gordon, Hatfield, J. W. Means, Nelson, Reinhart and Scott.

March 10—Regular meeting at the Public Library. Program: "Practical Considerations of Paranasal Sinuses" (lantern slides) by Dr. A. M. Hauer; "Laryngeal Neoplasms and Their Treatment" by Dr. M. Goldberg; "Management of Incipient Cataracts" by Dr. I. G. Clark; "Progressive Deafness", by Dr. H. M. Sage.—Bulletins.

Knox County Medical Society held a noon luncheon at Hotel Curtis, Mt. Vernon, on Thursday, February 27. Dr. A. G. Helmick, of Columbus addressed the society on "Errors of Diagnosis in Pediatric Practice".—News Clipping.

Pickaway County Medical Society held its regular meeting at the Boggs hotel, Circleville, on Friday evening, February 14, with 45 members and guests present, including visitors from Cincinnati, Columbus, Chillicothe and other nearby cities. Following the banquet, Dr. J. B. May, president of the society, introduced Dr. A. W. Holman as toastmaster. The guest of honor was Dr. Albert H. Freiberg, Cincinnati, president of the Ohio State Medical Association, who gave an address on "The Place of Medicine in Modern Life". A discussion on "Various Phases of State Medicine" was participated in by Drs. L. L. Bigelow, S. J. Goodman and J. F. Baldwin, of Columbus, Dr. Harry Brown and Col. Rowland, of Chillicothe, and Dr. Howard Jones of Circleville.

The Society met for a dinner at the Boggs Hotel on Friday evening, February 28. Dr. T. W. Mahoney, of the State Department of Health, division of communicable diseases, explained the work relative to immunization of school children against diphtheria. The society went on record as being in favor of an immunization campaign. Mayor B. T. Hedges and Safety Director J. Wallace Crist, of Circleville, were guests of the society.—News Clipping.

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MORE MEDICAL FAKERS

Officials of the Cleveland Better Business Bureau have issued a warning to Northern Ohio farmers to beware of a medical faker who has been selling pamphlets to rural residents. The following notice has been broadcast by the Bureau:

"A man giving the name of 'Dr. G. Carpenter' is selling a little pamphlet entitled 'Non Poisonous Remedies' to farmers in Northern Ohio. He states he has some connection with the National Health Board, an organization which cannot be located. He claims that one thing his organization is trying to do is to get a law passed to prevent doctors from prescribing in Latin, his organization believing that prescriptions should be in plain English.

"The booklet which he sells has in the front the names of a number of doctors under the heading 'Eminent Specialists Whose Reference in the Medical World is Regarded as Absolute Authority'. Some of these names have been checked. One of them designated as connected with the University of Michigan was never on the staff there. Another at the same institution left there thirty-nine years ago in 1890. The book contains a number of so-called simple home remedies for diseases. It is interesting to reproduce the one for goitre. 'An Indian Cure. Equal amounts of lard and large black ants. Fry and strain. Apply to neck twice daily. Ants can be caught by laying meat bone on ant hill, then tap bone over pan of hot lard'.

"The 'doctor' is described as about 60 years old, smooth face, gray hair, blue eyes, weighing about 190 pounds. On one solicitation the doctor gave his number as 132 Euclid Avenue (Cleveland). That is the address of a United Cigar store."

Governor Roosevelt of New York State has signed a bill appropriating $18,000,000 to provide for 6,000 new beds in the New York State Hospitals.

One-third of the inmates of federal prisons are narcotic addicts or violators, and more than half of the crimes of violence are due to the use of drugs, declared Congressman Fish, New York, in a recent address before the World Conference on Narcotic Education held in New York City.

Miss Dorothy Doane Henry, chief of the women's bureau of the Cleveland Police Department, has been appointed chief matron of the Girls' Industrial School, Delaware, the State Welfare Department has announced. She succeeds Mrs. Margaret Elton, Hillsboro, resigned.



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Steps to Eliminate Quack Broadcasting

Individual efforts being put forth in various sections of the country by local groups and organizations interested in the matter of eliminating false, misleading and dangerous propaganda issued by dealers in worthless and injurious products of all kinds is a hopeful sign, the *Journal of the Missouri State Medical Association* declares editorially, and indicates that a more general campaign to suppress dishonest and fraudulent advertising and propaganda is in the offing.

The *Missouri Journal* points to the recent action in New York State against broadcasting by medical quacks and unscrupulous health concerns (discussed at length in the February, 1930, issue of the *Ohio State Medical Journal*) as proof of the fact that progress in the campaign to clean-up the air is taking place.

A code of ethics recently adopted by the National Association of Broadcasters is cited as a step in the right direction. It reads in part:

"Recognizing that the radio audience includes persons of all ages and all types of political, social and religious beliefs, every broadcaster will endeavor to prevent the broadcasting of any matter which would commonly be regarded as offensive.

"When the facilities of a broadcaster are used by others than the owner, the broadcaster shall ascertain the financial responsibility and character of such client, that no dishonest, fraudulent or dangerous person, firm or organization may gain access to the radio audience.

"Matter, which is barred from the mails as fraudulent, deceptive, or obscene shall not be broadcast.

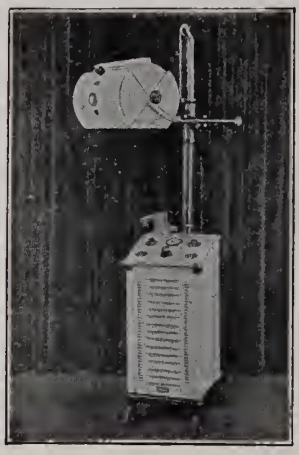
"Every broadcaster shall exercise great caution in accepting any advertising matter regarding products or services which may be injurious to health.

"No broadcaster shall permit the broadcasting of advertising statements or claims which he knows or believes to be false, deceptive or grossly exaggerated."

Radio broadcasters who adhere strictly to these rules and regulations deserve the support and cooperation of those interested in seeing that the welfare of the public is protected. Local agreements in keeping with these principles should go far in solving the question of radio frauds, medical and health, or otherwise.

The St. Louis County Medical Society is the latest county society to employ a full-time executive secretary. Among local medical societies which have full-time executive secretaries are: Cleveland Academy of Medicine, Toledo Academy of Medicine, Montgomery County Medical Society (in Ohio) and Milwaukee Medical Society and the Wayne County Medical Society of Detroit.

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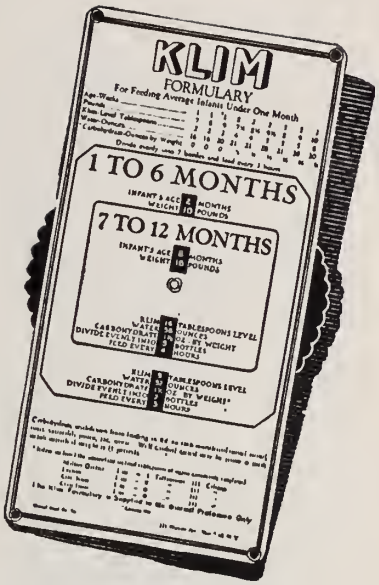
Another Comment on Euthanasia

The periodic discussion as to whether it is permissable or should be permissable to end life in the face of intolerable suffering or a future of mental or physical deformity has broken forth anew following the recent acquittal in the French courts of a son who shot his mother, a hopeless victim of cancer.

Facing a barrage of questions and arguments on this problem, so full of vivid human appeal, is not a new experience for the medical profession.

The futility of such controversies is obvious, for, as stated by the editor of the *Vancouver* Medical Association Bulletin "absolutely nothing" can be done about these things as far as the medical profession is concerned".

"We have seen unexpected advances in the past and we look forward with every confidence to the future," that writer declares in explaining his opinion." We feel that the incurable disease, if not the incurable accident of today, may be amenable to palliation or even cure tomorow. It is this belief, this hope, instinctive it may be which impels us still to strive for the amelioration of apparently hopeless cases. We are convinced that the body of medical opinion could not and would not ever become a party to severing the hold on life of even the most desperate case. To do this would be to stultify our training, destroy our hope and paralyze our initiative."



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Various Viewpoints on Pasteurization of Milk

Recognition of undulant fever as a growing public health menace has called forth heated arguments between milk producers and scientists regarding the value and necessity of pasteurization as the most reliable preventive against this disease.

That the disease presents a new problem in pasteurization is admitted. According to the *Illinois Health Messenger*, the diagnostic and research laboratories of the Illinois State Department of Health have found that 40 minutes at 140 degree F. are required to kill the porcine strain of the undulant fever organism.

Tests at the New York State Veterinary College show that the porcine strain is not killed by pasteurization at 140 degree F. for 15 minutes. Other tests there revealed that the flash continuous flow method at 160 degrees is efficient.

How some authorities view the present campaign for universal pasteurization is well summarized in a recent editorial in the *American Journal of Public Health*, which said in part:

"A statement in this *Journal*, July, 1929, page 784, in which certified milk was excepted from the advice urging pasteurization of all market milk, has brought some protests and some inquiries to the Editor.

"According to good authority, the most recent statistics show that over 50 per cent of the milk supply of the United States is not pasteurized, and much of this belongs to the lower grades. This is, of course, an argument for universal pasteurization, but it also shows that the protests against unpasteurized certified milk are somewhat premature or misplaced energy. Values in public health should always be borne in mind. Is it not better public health practice to urge and teach the pasteurization of the lower grades of milk, than to spend time criticising the non-pasteurization of the highest grade produced?

"It is also said that much certified milk is not produced according to the best methods. This may be partly true, but considerable experience in the examination of certified farms, and studying the production of certified milk, as well as statements of others better qualified, justify the belief that practically all certified milk is of high grade. It is recognized, of course, that accidents happen in certified dairies, and that employes may occasionally infect the milk through being carriers, or on account of acute illness. . . .

"While we advocate pasteurization, and have advocated it for many years, we still believe that raw certified milk is as good or better than a poorly pasteurized product, or one which has received proper treatment, but careless afterhandling. If the treatment is not properly carried out, it is not pasteurization, and the process should not be blamed, as it often is, for the faults which lie in apparatus or in operation."

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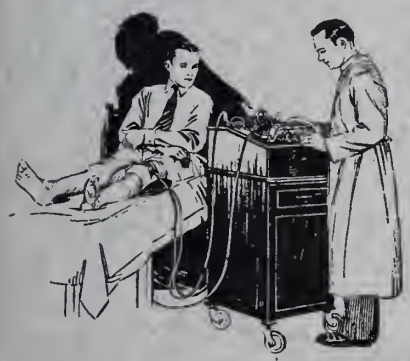
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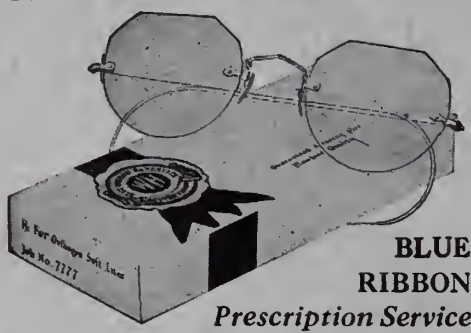
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MAY 1, 1930 VOLUME XXVI
Number - - 5

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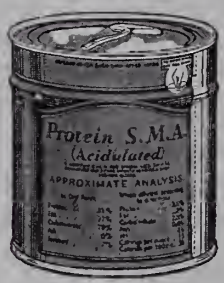
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Ohio State Medical Journal

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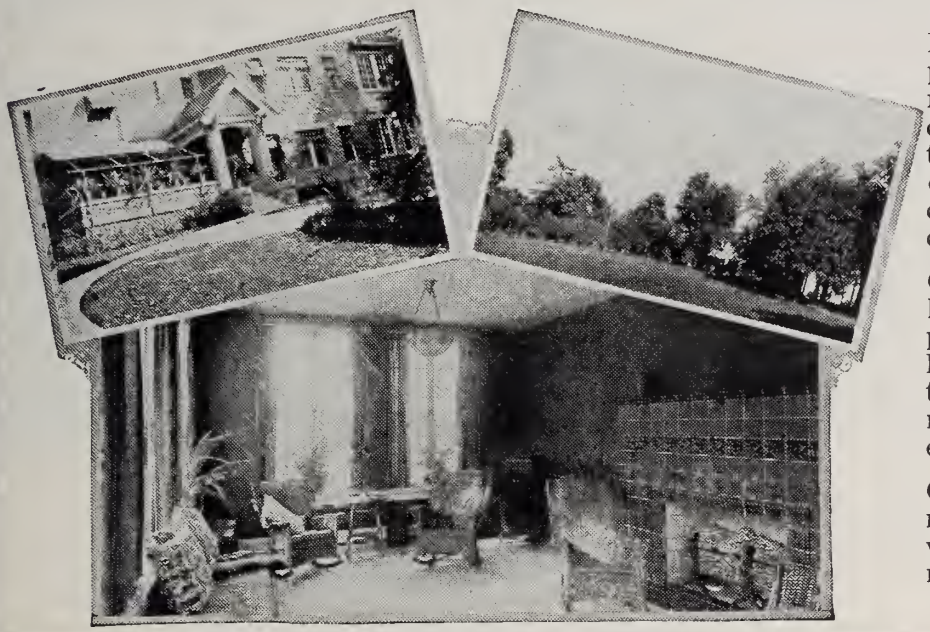
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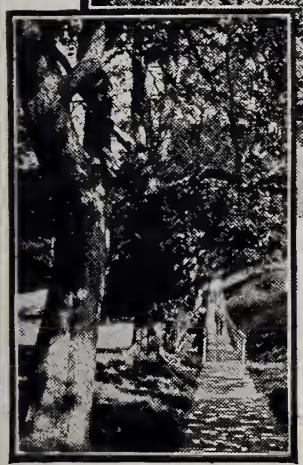
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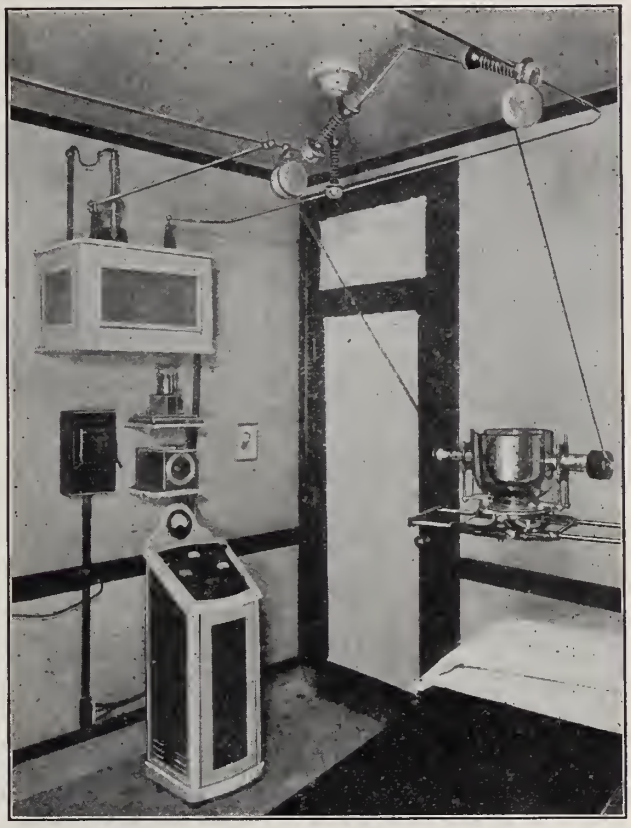
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PUBLIC HEALTH — SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Will You Be Present at Annual Meeting?

Arrangements for the Eighty-Fourth Annual Meeting of the Ohio State Medical Association, to be held Tuesday, Wednesday and Thursday, May 13, 14 and 15, at the Neil House, Columbus, have been completed.

Since the forthcoming meeting promises to be one of the largest and most interesting gatherings in the history of the State Association, every member should, if at all possible, avail himself of the opportunity to attend.

Those who have not as yet made hotel reservations should do so promptly. A list of first-class, centrally-located Columbus hotels was published in the March and April issues of *The Journal*. Don't delay, as Columbus' hotels are always well filled with transient guests.

Those who have studied the official program for the three-days gathering, published in full in the April issue of *The Journal*, were undoubtedly impressed with the high caliber and variety of the offerings which have been scheduled. Eight out-of-state speakers, as well as many of the outstanding members of the medical profession in Ohio, will take part in the various general and scientific sessions, discussing not only some of the newest achievements in the field of scientific medicine and public health, but also some of the important questions of social medicine.

The Program Committee has arranged an unusual treat in the form of three scientific motion pictures, to be shown preceding the General Session on Wednesday afternoon.

One of the features of the meeting will be the annual banquet on Tuesday evening, May 13, when the President and President-elect will deliver their annual addresses. Other entertainment for the dinner, revived after having been omitted from the annual meeting program for several years, is being arranged. Detailed information on this feature of the gathering will be found elsewhere in this issue of *The Journal*.

Indications now are for a capacity audience at the Wednesday evening General Session when many of the important social and economic problems affecting medical practice and public health, as well as some of the questions on which the attention of medical educators are focused, will be discussed by Dr. L. L. Bigelow, Columbus, former president of the State Association, and Dr. Willard C. Rappleye, New Haven, Conn., director of study of the Commission on Medical Education.

Early arrivals at the annual gathering will not find their time wasted. The Columbus Academy of Medicine has arranged an interesting program of wet and dry clinics to be held Monday, May 12, at the various Columbus hospitals and medical centers. A program of these will be found elsewhere in this issue of *The Journal*. Those who are interested in golf will find plenty to occupy their time and attention at the Columbus Country Club where, on the same day, the Tenth Annual Tournament of the Ohio State Medical Golfers' Association is to be held.

The usual number of college, fraternity and class reunions and luncheons are being planned in addition to the many other events scheduled in the official program.

The stage is set for one of the best and most instructive reunions in the history of organized medicine in Ohio. All that is needed to make the 1930 gathering a success from start to finish is an outpouring of members from all parts of the state.

The Annual Reports

Organized medicine in Ohio, between Annual Meetings, is about to close another year of active and united effort in the interest of scientific medicine, public health and the economic and social welfare of the members of the medical profession.

The past twelve months have been periods of unusual activity for the Ohio State Medical Association, as briefly reflected and summarized in the reports of the standing and special committees, the Council and officers of the State Association, published in this issue of *The Journal*.

These reports, constituting an inventory of some of the important problems with which the medical profession has been confronted during the past year and means taken to solve them, should be read by every member of the State Association. They merit careful and thorough consideration since they contain an analysis of the numerous complex questions affecting scientific medicine, medical practice and public health, and reveal some of the accomplishments of medical organization in fields in which it is intensely interested.

Much credit and appreciation is due the members of these committees and the Council and officers for their unselfish and untiring efforts during the past year and the large amount of time devoted by them to the many problems and

questions which have arisen. The responsibilities of these committees and of the Councilors and officers continue to become greater year after year. Situations calling for keen, careful and accurate judgment are growing more numerous and it is to the credit to the membership at large that it has been represented on the firing line by those who possess the necessary qualifications.

Moreover, a considerable portion of the credit for the success and accomplishment of the committees and officers belongs to the entire membership of the State Association, the great majority of whom have taken an earnest interest in and provided active and prompt support to the many organization activities of the past twelve months. In fact, the accomplishments of the organization have been made possible *only* through the harmony and cooperation, as well as unusual interest, shown by the membership at large. It is highly important that this spirit be continued and increased during the forthcoming twelve months when new and vital questions must be considered and decided.

It is vital to the continued strength, usefulness and prosperity of organized medicine in Ohio that the next annual inventory of the State Association be as praiseworthy as that of the closing year.

Methods of Antivivisectionists

Antivivisectionists, repulsed many times by those who recognize the indispensable value of animal experimentation to progress in the cure and prevention of disease, are apparently mobilizing their forces for another campaign, designed to eliminate a medium which has been fundamentally responsible for saving the lives of millions of human beings and furnished scientists with data for perfecting cures and preventives for many of the fatal human ailments.

Recent newspaper articles from abroad would indicate that the foes of vivisection are busily engaged in distributing their dangerous propoganda and showing unusual activity.

A story under a Manchester, England, date-line declares that the Manchester branch of the British Union for the Abolition of Vivisection is "going forward more strongly than ever" and that "many members have doubled their subscription."

This same article also states that an order has been placed for a propaganda van and that "the committee is considering the circulation of a small news bulletin".

News items from Vienna about the International Congress of the Animal Protection Societies of the World say that resolutions were adopted recommending establishment of a special animal protection bureau in every country and the "abolition of vivisection".

Following a recent antivivisection rally at London, England, when speakers were jeered at by those holding opposite beliefs, a leader in the British Union for Abolition of Vivisection issued the following ridiculous statement:

"Our opponents are afraid. They know that after 2000 years of materia medica, disease has not yielded to drugging and they hope you don't know it. They know too that vested interest is at the root of opposition to vivisection."

Before this foolish statement had cooled off, along came the secretary of the Performing and Captive Animals Defense League with one even more fallacious. The real thing to be considered at the present time is "the economic position of the medical profession", this proponent of antivivisection declared, adding:

"Until medical men are assured of their living, it is bound to be more important than health. The problem before antivivisectionists is to induce the Government to place medical men on the same footing as civil servants. Until this desideratum is reached, all the products of vivisection, such as vaccines and sera, are the chief means by which the medical profession lives."

These are examples of the tactics being used to abolish animal experimentation. Not satisfied with their intent to suppress one of the greatest aids to the health and welfare of humanity, these cultists turn to false propaganda, accusing the medical profession of toying with the health of their patients.

The fanaticism of these cultists and the unsoundness of their reasoning are demonstrated in their assertion that animal experimentation has contributed little or nothing to the advancement of medical science.

Vivisection is responsible or largely responsible for the successful treatment of typhoid fever, diphtheria, smallpox, plagues, malaria, lockjaw, hyprophobia, pneumonia, meningitis, malta fever, yellow fever, syphilis, sleeping sickness, and many other serious and fatal conditions. It also has contributed largely to prevention of mortality in surgery, fractures and obstetrics. It has produced the modern methods of blood transfusion and glandular therapy. Eventually cancer, which still awaits solution, will be conquered through knowledge acquired from animal experimentation.

These are but a few of the incalculable achievements of animal experimentation, while on the other hand the misguided persons who see harm in this work have not saved a single human life by their efforts; have not contributed a single beneficial discovery to science and have not abated or cured a single disease.

Methods which have contributed so much toward the health, happiness and prosperity of the human race must not be discarded at the whim of illogical cultists.

Organizations interested in public health cannot be too energetic in nipping this dangerous propaganda as it blossoms.

Improvement in Preventive Medicine

The injustice and absurdity of criticism often hurled at the medical profession by cultists and other groups who can see no good in the methods of scientific medicine is emphasized in a recent report made to the United States Public Health Service by the New York City Department of Health.

In calling attention to the fact that the death rate in New York City has dropped from 30 per 1000 population to 12 per 1000 in the past 50 years, the New York City Department of Health report said:

"Those of us who remember the late Abraham Jacobi will perhaps recall his graphic account of medical work 60 years ago. In those days, as Jacobi often reminded his audience, a physician counted with confidence on a considerable number of severe cases of scarlet fever and diphtheria to carry him through the winter, and when these were over the many cases of cholera infantum, malaria and typhoid fever usually assured the continuance of a lucrative practice during the summer and fall.

"Those were the days when a population of less than 1,500,000 each year witnessed over 1200 deaths from scarlet fever, some 1500 deaths from diphtheria, 400 to 500 deaths from cholera morbus, 500 deaths from typhoid fever and an equal number of deaths from malaria. How conditions have changed! With a population four times as great, scarlet fever now causes less than 100 deaths a year, diphtheria about 600 deaths, cholera morbus about 1000 deaths, typhoid fever 100 deaths and malaria practically none.

"In contrast to conditions 50 to 60 years ago, when the death rate in this city was over 30 per 1000, we now have a death rate of 12. It is a record of which the medical profession can well be proud. It shows that despite all the carping critics now and then say about the work of physicians, the fact remains that the medical profession stands practically alone as the one striving constantly to wipe out the conditions on which rests its livelihood."

Accurate Orders to the Nurse

Cooperation between the medical and nursing professions and efficiency in the relationship which exists between the two are necessary to insure the sick proper care and treatment.

Occasionally the physician, in his hurry, fails to be specific enough in his orders to the nurse, permitting a chance for errors in the prescribed treatment. The physician cannot consider the nurse a mind-reader. The nurse in turn must be careful to follow closely the orders issued by the attending doctor.

Some suggested points to be remembered by the physician, as well as the nurse, on cases either at home or in hospitals, were listed as follows in a recent issue of the *Pennsylvania Medical Journal:*

1. Write all orders, and in ink; verbal orders to be given only in emergencies.
2. Write legibly. The nurse should not be placed in the position of having to guess at what has been written.
3. In writing for the administration of drugs, it is preferable to write the official name of the drug in full and not use chemical formulas, synonyms or abbreviations.
4. In outlining special treatment, make sure the nurse understands what is required to be done.
5. Anticipate, so far as possible, what may be required before the next regular visit so that the nurse can dispose of many details in the morning hours.
6. Cancel in writing all previous orders that are to be discontinued.
7. Do not write unnecessary orders.
8. Remember that the nurse desires to carry out, or should, orders as written, so write them so that they cannot be misconstrued.

Other Noble Professions

A Federal official's recent reference to the military as "the noblest profession on earth" has raised serious doubts in the minds of many with all due respect to the distinguished, courageous high-minded men who have represented this nation and others in that branch of public service.

The editor of the *Journal* of the Missouri State Medical Association points to the heroism of the country doctor to refute the boast that the profession of soldiering is more noble than the profession of medicine.

Referring to the country doctor, the Missouri editor says: "To this day he very often must be his own nurse, druggist and chauffeur. The roads over which he must make his daily and nightly march over the great enemy of mankind are still very often topographically a No Man's Land. Sometimes he gets paid—after the harvest or when a load of stock brings in enough to satisfy other creditors first. He has no time to be ill himself.

"One campaign against membranous croup may cost him more in physical hardship, in actual suffering, in danger to his own life and in mental anguish than the campaign against Moscow cost Napoleon.

"So much for the honor and hardships of the fight itself. But there remain to be weighed the respective contributions of the physician and the

soldier to the welfare and happiness of mankind and to the glory of mankind and the divergent hopes and ideals which arm each for his battlefield."

Another phase of the argument is commented on by other writers who deplore the long overdue recognition this nation owes to the men and women who have made the world a safer place in which to live through their labor in the medical laboratories or in lands of pestilence and disease.

"If military morale is raised by citations and medals, is it not reasonable to suppose that disease fighters, microbe hunters and other scientists would undergo an uplift of the clan if somebody gave them a pat on the back?" asks the *Medical Journal and Record.*

"If we want to do away with war," continues that publication," why not make the victories of peace more attractive? War is a difficult, dirty job; equally so is the combat of disease. There should be created by Congress a decoration for those whose brave and meritorious exploits outside the field of war entitle them to public recognition. No bards may sing the deeds of men of the laboratory and sanitation in the field, but if we are a farsighted and practical people, we will give to these faithful and heroic workers their meed of praise in tangible form."

Why Patients Complain

Rene Pnaux, French journalist, following a recent visit to America, wrote several articles setting forth his impressions of the New World, which he termed a "country in the making" and "in the full crisis of growing, with all the exaggerations and worries of adolescence".

One observation made by Pnaux seems to sum up the economic situation faced by America, as he sees it at least, and deserves consideration by those who are interested in and attempting to solve some of the economic and social problems of the period.

"I was somewhat horrified at the present methods of existence of a countless number of Americans who buy anything and everything on credit; looking for the morrow to bring in the dollars that they have spent the day before, accustomed to the idea that it is normal not to deprive themselves of anything", writes the French fourth-estater.

"This doctrine of 'living well' has determined the continual rise of salaries, and the corresponding increase of the cost of living, the social inflation which is just as dangerous as the financial inflation," he added.

In other words, Pnaux believes that Americans are living beyond their means and therefore violating a fundamental principle of sound economics.

The physician sees evidence of this "social inflation" daily in his care of the sick and injured. Any practitioner numbers among his patients those who ride in expensive automobiles; listen to costly radios; expect high-priced hospital rooms and specialized medical service, and attire themselves in the most expensive garments, demand all the "extras" and luxuries, but who protest vigorously when confronted with a moderate bill for medical, surgical and hospital services.

Countless Americans have as yet failed to recognize the difference between the luxuries and necessities of life. There is little hope of solving the so-called problem of cost of medical care, until the public begins to realize that medical service is one of the necessities of life and that every family must prepare to pay for it on the same basis as it pays for its other necessities and customary comforts.

Types of Social Welfare

Frequently those engaged in organized social welfare work are prone to view with surprise the lack of enthusiasm, and often opposition, shown by organized medicine and the medical profession, collectively and individually, toward some of the activities fostered by these groups, many of which are national in scope.

The apathy of the medical profession toward some of the programs of endowed organizations of a social nature is easily understood after thorough analysis of impractical methods often adopted for putting such programs into operation.

An example of the broad generalization and the unsound reasoning employed by some subsidized social workers is found in a recent issue of the *New York Sun*, in which the executive secretary of a national organization promoting a plan for old age security, declared:

"In practically every industrial nation on earth the problem has been solved intelligently and constructively through a system of compulsory insurance, conducted by the Government, which distributes the burden of illness upon the entire community. Everywhere this plan has been found a most workable and feasible one. * * * There is only one way of solving the problem intelligently and that is through a system of health insurance such as is now in operation everywhere."

This statement is further evidence of the charge often voiced by medical speakers that state medicine, with all its questionable benefits and disadvantages, is being promoted through propaganda issued by paid executives of some nation-wide welfare agencies.

As long as certain organized social welfare groups insist on backing programs founded on fallacious, unsound and paternalistic schemes they should not be surprised to find the medical profession, unselfishly and with the health and welfare of the public in mind, regarding with suspicion their views and activities.

The Use of Controllable Spinal Anesthesia In Five Hundred Major Operations

JOSEPH L. DECOURCY, M.D., Cincinnati

SPINAL anesthesia was first described by Corning[1] in 1885; but it was not until recently, when Pitkin[2] published a controllable method for its administration, that it was employed on a large scale except in the presence of contra-indications to the use of ether.

Hitherto the mortality from spinal anesthesia was high and there were other serious objections to its use. In round numbers there was one death from the anesthetic in every thousand cases. Martin and Arbuthnot[3] in 1926 reported six deaths due to it in a series of six thousand cases.

A fall of blood pressure was one of the most alarming features of spinal anesthesia as previously employed. Sometimes it was extreme and resulted fatally.

Another discouraging observation was that some of the anesthetic agents employed proved toxic. There were many deaths due to the use of cocaine intraspinously. Stovaine, although not immediately toxic, was shown by Spielmeyer[4] to cause permanent damage to the spinal cord, notably degenerative changes in the large polygonal motor cells.

With the general use of novocain for spinal anesthesia, accidents and ill effects became much less common. Still there were objections to its use, largely because of the fact that the solution injected was diffusible and could not be controlled.

Pitkin[2] in 1927, after more than a year's experimentation, devised a non-diffusible formula of novocain, the use of which keeps the control of anesthesia constantly in the hands of the operator. It consists of 200 mg. of novocain and 2.2 mg. of strychnine sulphate in a special solvent consisting of 14.5 per cent alcohol and sterile water with the addition of an amylo-prolamin combination. This preparation is called spinocain and is supplied in 2 cc. ampules.

The principle advantage of spinocain is that it makes controllable spinal anesthesia possible. Being of lower specific gravity and of a viscous consistency that prevents diffusion, it floats upon the spinal fluid like the air bubble of a spirit level.

The toxicity of spinocain as compared with that of anesthetic agents previously employed is slight. Amounts of spinocain equivalent to 300 or even 400 mg. of novocain have been used with no untoward effects. Apparently, the addition of strychnine is an additional safeguard against motor and vasomotor paresis.

Spinal anesthesia may be made almost painless by preliminary use of local anesthesia. Intradermal injection of a solution containing 1 per cent novocain and 5 per cent ephedrin hydrochloride may be used to render the introduction of the spinal puncture needle painless. Also, the subcutaneous injection of this amount of ephedrin raises blood pressure and is one factor in preventing the much dreaded hypotension.

It must be remembered that spinocain, being of lower specific gravity, immediately rises to the top of the column of spinal fluid. If it is injected with the patient in the sitting position, it will appear in the cervical region in nine to eleven seconds.

When the spinal puncture is made, the patient should lie on his side with his back bowed out, his head bent, and his knees flexed upon his abdomen. By this means the apertures between the second and third and the third and fourth lumbar vertebrae are increased to the maximum.

While the injection is being made, the table should be kept level. Immediately afterward, it should be inclined to a 5, 10 or 15 degree Trendelenburg position, as measured by the tiltometer attached to the table, according to the height of the anesthesia desired.

When the table is tilted to a 15 degree Trendelenburg position, anesthesia is limited to the perineum and lower extremities. At 10 degrees, it extends up to the umbilicus; at 5 degrees, to the costal margin. The level of anesthesia should be confirmed by the anesthetist by testing sensation with a camel's hair brush and needle from time to time.

By inclining the table to less than a 5 degree Trendelenburg position, the level of anesthesia may be brought even higher than the costal margin. However, any anesthesia extending above the distribution of the seventh thoracic nerve is not to be recommended, because of the dangerous proximity of the respiratory center in the medulla oblongata. Certainly such practices as removing a wen from the scalp under spinal anesthesia, of which some surgeons boasted, are to be condemned.

The side of the anesthesia, whether right or left, is also under control when spinocain is employed. For a right-sided operation, the patient should lie on his left side. Then the lighter spinocain solution floats up on the spinal fluid and anesthetizes the right spinal roots first. For left-sided procedures, the patient should lie on his right side. When a median incision is to be made, there is no choice of sides but the patient

Read before the Surgical Section, Ohio State Medical Association at the 83rd Annual Meeting, Cleveland, May 7-9, 1929.

From the Surgical Section, DeCourcy Clinic.

should lie on his back immediately after the injection.

The dosage of spinocain recommended is generally 2 cc., unless anesthesia is to be confined to the perineum, when 1 cc. is considered sufficient. In my own experience, 1 cc. is enough for all low abdominal work. The use of a lesser amount of the solution and careful handling of the viscera during operation are important factors in preventing or mitigating postoperative nausea. When the technique is employed skillfully, nausea and vomiting are of rare occurrence.

The anesthesia is uncomplicated in practically every case. Its duration depends largely on the amount of solution injected. If sensitiveness begins to return before the operation is completed, a reinjection of spinocain may be made. Anesthesia begins first in the perineum, later in the legs, and disappears in the reverse order.

Fall of blood pressure, pallor and cold sweats —formerly dreaded features of spinal anesthesia in unfavorable cases—no longer occur with this new technique. Blood pressure readings taken before, during and at the completion of the operation show no significant variations, unless traction is made upon the stomach or intestines. Frequently there is a rise in the vascular tension. I have never observed an alarming fall. Preliminary use of ephedrin and the Trendelenburg position are favorable factors.

Attention to details will accomplish much by way of preventing minor complications. The lumbar puncture headache, formerly considered unavoidable, is really the result of clumsy technique whereby an excess of spinal fluid is removed. Not so many years ago, one would frequently see a test tube half filled with spinal fluid sent to the laboratory for examination. Small wonder that headaches followed this procedure!

The large needles formerly used were unnecessary. Frequently they tore the membranes in such a manner as to cause subsequent seepage, producing a loss of spinal fluid in this way even though an excess was not directly withdrawn. A needle of 20 to 22 gauge with a bevel of 45 degrees is best suited to spinal puncture. The needle should have a short bevel, the lower portion of which is rounded so as to cut a miniature trap door in the dura when inserted. When the needle is withdrawn, the opening closes by intradural pressure.

Postanesthetic paralyses and intradural hematomata do not occur with proper technique. They are relics of the old days when clumsy needles were used, often inexpertly.

Spinal anesthesia is no longer to be regarded merely as an alternative to general anesthesia when the latter is contra-indicated. In many respects, it is safer for routine use for all operations below the diaphragm.

Hitherto the indirect dangers of ether anesthesia have not been fully appreciated. Although ether undoubtedly produces only a small proportion of deaths on the table, there is a fairly large percentage of cases, whose exact proportions cannot be determined, in which the anesthetic must be a contributory factor to the mortality and morbidity following operation.

Recent pharmacologic investigations are demonstrating that the toxicity of ether is greater than was formerly believed. Its toxic effects on the function of liver and kidneys cannot be denied. Also there is some measure of acidosis even after mild ether narcosis. Respiratory complications may be attributed in part to the use of ether.

At our Clinic the choice of anesthetics has been reversed. Spinal anesthesia is now employed as a routine for operations below the diaphragm and general anesthesia is used only in exceptional cases, when spinal anesthesia may for some reason or other be considered undesirable.

In a previous communication[5], I reported one hundred cases in which spinal anesthesia was employed successfully by this method with no mishap. I have now used controllable spinal anesthesia in more than five hundred cases. There were no deaths. In no instance was there any ill effect or even cause for alarm. Even patients suffering from severe septic conditions before operation went through spinal anesthesia with no difficulty.

All types of operations were included in my series. I have been using controllable spinal anesthesia as a routine for appendectomy and cholecystectomy; also, for gastro-enterostomy, nephrectomy, prostatectomy, hysterectomy, perineorrhaphy, lower limb amputations, and operations for cancer of the rectum. It is particularly useful for such minor operations below the diaphragm as may require more than local anesthesia.

From the standpoint of surgical convenience in operations upon the stomach and gallbladder, the muscular relaxation and absence of straining produced by spinal anesthesia are great advantages. They facilitate better exposure of the operative field and may materially shorten the duration of the operation.

Spinal anesthesia must be employed only by a skilled anesthetist who has had experience in performing spinal punctures. His supervision of the patient is just as important as when general anesthesia is given. He must watch out for change of color and other alarming symptoms. Also, he should take frequent readings with the sphygmomanometer and test the level of anesthesia from time to time. Rigid asepsis must be observed in injecting the spinocain solution; otherwise, there is danger of causing septic meningitis.

CONCLUSIONS

1. The use of controllable spinal anesthesia by

Pitkin's method is extremely safe, satisfactory, and free from the objections inherent in the older methods.

2. The level of anesthesia may be controlled accurately by tilting the table to the proper degree of the Trendelenburg position.

3. The spinocain solution should be injected with the patient in the recumbent position, although we have found this to be unnecessary.

4. There is no danger of shock or an alarming fall of blood pressure when proper technique is employed.

5. In a series of five hundred operations controllable spinal anesthesia was employed with satisfactory results and no mishaps.

6. This method of controllable spinal anesthesia is recommended as a routine for all operations below the diaphragm other than those that can be performed under local anesthesia.

DECOURCY CLINIC.

REFERENCES

1. Corning, J. L.: Anesthetic Effects of the Hydrochlorate of Cocaine When Subcutaneously Injected, New York M.J. 2:317, 1885.

2. Pitkin, G. J.: Controllable Spinal Anesthesia, J.M. Soc. New Jersey, 24:425, 1927.

3. Martin, H. W., and Arbuthnot, R. E.: Spinal Anesthesia, J.A.M.A., 87:1723, 1926.

4. Spielmeyer, W.: Veränderungen des Nervensystems nach Stoveainanästhesie, Munchen, med. Wchnschr. 55:1629, 1908.

5. DeCourcy, J. L.: Controllable Spinal Anesthesia: Use of Pitkin's Method in One Hundred Cases, Am. J. Surg. 5:620, 1928.

DISCUSSION

T. E. JONES, M.D., Cleveland: We have used spinal anesthesia in over 300 cases, first using the novocain crystals and later on the Pitkin technique. We have modified this latter from time to time in minor ways.

We feel that inasmuch as the effect of ephedrine is not as instantaneous as is the drop in blood pressure following novocain injection, it is better to give the ephedrine an hour or two before the spinal anesthesia is given.

The technique of having the patient on a level table has been modified somewhat also. A fat woman with large hips is obviously in Trendelenburg when she lies on her side on a flat table. Therefore, if one wants anesthesia above the umbilicus in this type of case, it is necessary to tip the table in order to have the novocain rise in the spinal canal. The opposite is true in a man with small hips and large shoulders.

Nausea happens very frequently during the anesthesia, but post-operative nausea only occurs in about 10 per cent of the cases.

The average blood pressure drop is from 20-30 mms. of Mercury, but it does not drop as much with Pitkin's solution as with the straight novocain crystals; the condition of the patient is also better with the Pitkin technique.

We have had five persistent headaches lasting from 4-7 days following spinal anesthesia. All cases, however, cleared up at the end of this time.

We have had no paralysis, and as far as we can learn, no case of hematoma in the spinal canal.

I think that the only contra-indications to its use are cases of mechanical intestinal obstruction and peritonitis.

There has been one death following the use of spinal anesthesia, but I do not think it can be attributable to the anesthesia. It was a case of a man who died rather suddenly with a pain in his chest eight days after operation. Autopsy revealed thrombosis in the pulmonary artery. The pulmonary artery contained several plaques and engrafted on one of these plaques was a thrombus. This is quite as likely to happen following any anesthesia.

DR. HOWARD DITTRICK, M.D., Cleveland: Spinal anesthesia has proved to be definitely indicated in certain classes of patients requiring surgical intervention and to be worthy of consideration as a routine measure in surgery below the diaphragm.

In view of the fact that it has met with such a general appeal it is well to bear in mind that it is not entirely free from danger. One must be sure that the agent to be injected into the spinal canal is free from toxic effects. During the past year in visiting one of the clinics in Italy, where this method is used routinely in abdominal surgery, the surgeon informed me that he had lost his first three cases in which he had employed spinal anesthesia, through a very severe acute meningitis. This was attributed to a fault in the manufacture of the ampoules and with a reliable product such as is now employed no untoward results are encountered.

This observation is merely cited to call attention to one feature which may spell disaster. There is no denying that anyone who has used it is enthusiastic over spinal anesthesia.

G. W. KEIL, M.D., Columbus: At the Ohio Penitentiary Hospital of 160 beds, we have used spinocain in 122 major operations with thirteen visiting surgeons. The operations cover seventeen different types, mostly abdominal, such as gastroenterostomies, cholecystectomies and appendectomies; others cover amputations of legs, inguinal and ventral herniotomies, etc. These 122 operations have been performed since Nov. 22nd, 1928, a little over five months. Dr. Jos. L. DeCourcy has removed many appendices in from five to eight minutes. When you consider that the time the patient is being draped for the operation is also used for the taking of effect of the spinocain, you save about ten minutes or more.

I believe, gentlemen, that spinocain or spinal anesthesia with some form of novocain or similar drug has come to stay and that in five years or so, spinal anesthesia will be used as freely as we now use intravenous medication for lues and other diseases. All it takes to administer spinocain is nerve and the knowledge of how to perform a lumbar puncture and a certain, simple technique.

There are many advantages in using spinocain, chief of which to me are:

1. Elimination of an inhalation anesthetic with all its attendant dangers and disagreeable features such as nausea, straining, vomiting and fear:

2. With the negative pressure produced in the abdomen, the viscera are out of the field of an operation with its danger of cutting into a loop of intestine in an abdominal operation, and:

3. Rarely must an abdominal pad be used with its injury to the delicate peritoneum, causing postoperative adhesions. In ascites, exudative peritonitis, gallbladder and stomach work, a pad may be used to avoid soiling the field of the operation.

The only danger with spinocain is lowered blood pressure, so, at the Ohio Penitentiary Hospital where man power is cheap, we have a

laboratory technician take the blood pressures before administering the spinocain and every five minutes thereafter during the operation. If we find the blood pressure has been lowered to 80 mm., mercury systolic, we do not operate until the pressure rises above 100, then administer adrenalin, lower the head still more and watch the patient. In most spinocain anesthesias, the pressure is lowered twenty points and to us, this is a good indication of the anesthetic effect.

In one case, the pressure went to zero, the patient vomited and he had a mucous discharge from the bowel. We did not operate on this case as we were only too glad to use vigorous measure to save the patient, an elderly man. In only three other cases, did we have to resort to ether and then only on account of the slowness of the visiting surgeon or, where the pressure rose to above 150, when for some unknown reason, the spinocain did not take effect.

We had one case of another visiting surgeon take two hours and twenty minutes for the reduction of a multiple, recurrent, ventral hernia, long enough time I am sure for the vast majority of all operations below the diaphragm. Forty of these operations were performed by myself while I assisted in most of the others.

Twenty of these operations were double ones, that is in the gastroenterostomies and cholecystectomies and right inguinal hernias, the appendix was also removed and in appendectomies, a complete exploratory of the upper abdomen was also made; organic and traumatic adhesions also broken up in the abdomen.

I wish to heartily thank Dr. Jos. L. DeCourcy for the introduction of spinocain at the Penitentiary Hospital, also his anesthetist Dr. Alvin Renneker of Cincinnati for training me in this delightful method of giving an anesthetic and last but not least, the Metz Laboratories for the complimentary packages of Spinocain for trial use when Spinocain is already a proved anesthetic. Gentlemen, I thank you.

CHARLES J. MCDEVITT, M.D., Cincinnati: While spinal anesthesia is not new, Pitkin's solution and technique are new, and have eliminated the two great dangers of this form of anesthesia, namely, the fall in blood pressure, and trauma to the cord. Pitkin's solution need never be administered higher than the third lumbar interspace, as the height of the anesthesia can be controlled by the proper tilting of the table. Spinal punctures at this point can not traumatise the cord as it ends well above this level.

The ephedrine administered first has in our hands eliminated any marked fall in blood pressure, and has led us to feel that this technique is the safest form of anesthesia that can be used for major operations below the diaphragm.

The nausea sometimes seen during the operation, the occasional post operative headaches, and other minor objectional features are so trivial as compared with the toxic post operative picture of general anesthesia, that there is no comparison.

CLARENCE S. ORDWAY, M.D., Toledo: Spinal anesthesia is not new. In the writer's early experience with cocain and stovain it was not popular because of the dangers following its use but a new drug, under the heading of novocain, or its derivatives, created new interest in this method of anesthesia then along came Doctor Pitkin, who through extensive research work, developed a preparation, in the way of a fluid with lighter specific gravity than spinal fluid, with the preliminary use of ephedrine to prevent pressure drop. This has placed in the hands of the profession a most valuable aid in surgery.

At our clinic we have tabulated over one hundred cases since the first of the year with a slight modification from the Pitkin method. During that time the writer was operated and this technique used. This personal experience gave us a good opportunity for its study and gave us a better view for future operative work. In this series of patients we had one with curvature of spine, one with an injury to the spinal segments, from a sixty foot fall, and were unable to reach the spinal canal. Nitrous oxide gas was substituted. One case with pressure drop due to large amount of blood lost from an old ectopic. The pressure came back to normal almost like magic with one intravenous instillation of glucose with no further complications. Nausea in six cases was easily controlled. Neuritis in both elbows in one case operated for appendicitis. The writer sustained a severe neuritis of the left musculospiral nerve lasting three days. Never having had neuritis before these two cases will be of unusual interest for further study.

Three to seven minutes is our average time for complete anesthesia, none running over ten minutes. Length of time that anesthesia has been maintained is from forty-five minutes to two and one-half hours, depending on tilting and pressure used. It has not been necessary for us to tilt the patients, due to lack of anesthesia, on right or left side. Many cases of non-complicated appendectomy, or like operations, are completed in twenty minutes, including anesthesia.

Doctor Pitkin states that the fluid is fixed in twelve to fifteen minutes. We find our patients fare better if the foot of the bed is elevated from six to eight inches for five to six hours following the operative procedure. Fowler's position should be discouraged for at least forty-eight hours.

We have adopted the plan of giving one quarter grain of morphine for each one hundred twenty pounds body weight instead of the ordinary dose as formerly. The initial dose is given with atropine.

The ages of the patients, who have been operated upon by us in this series, were from five to eighty years. Post-operative care and recovery is simplified 75 per cent over former methods.

Spinal anesthesia is too delicate a procedure to become generally used but is here to stay in the hands of the experienced. It approaches the ideal from the costal cartilage down.

The Medical Museum. Modern Developments, Organization and Technical Methods, based on a new system of visual teaching. By S. H. Daukes, O.B.E., M.D., D.P.H., D.T.M. and H. Director of the Wellcome Museum of Medical Science, affiliated to the Bureau of Scientific Research. An amplification of a thesis read for the degree of M.D., Cambridge. The Wellcome Foundation, Ltd. Endsleigh Court, 33, Gordon St., London.

The Road to Health. The Jayne Foundation Lectures for 1929. By C. E. A. Winslow, Dr. P. H., Professor of Public Health, Yale School of Medicine; Fellow and Past President, American Public Health Association; Member, Public Health Council, State of Connecticut; Member, Health Committee, League of Nations. The Macmillan Company, New York.

The Common Head Cold and Its Complications. By Walter A. Wells, A.M., M.D., F.A.C.S. Professor of Oto-Laryngology, Georgetown University, Washington, D. C. With an introduction by Hugh S. Cumming, M.D., Surgeon General, United States Public Health Service. The Macmillan Company, New York.

Streptococcic Meningitis: Report of a Recovery

HOMER D. CASSEL, M.D., Dayton

PURULENT meningitis of streptococcic origin is usually fatal. Therefore I believe it worth while to report the recovery of a patient, following the use of spinal drainage, serums, vaccine, drugs and special posture. A brief summary of the literature is included.

CASE REPORT

The patient was a married white woman 22 years of age. On January 21, 1928, two small tumors of the left breast were excised by Dr. Fred K. Kislig. On examination by frozen section these appeared to be malignant and the whole breast and axillary glands were removed. The hospital stay was uneventful. She returned to her home on the eighth day. On January 31 she was seized with a fever and chill. The temperature was 104.0 (F). She subsequently carried a sporadic fever which we wrongly attributed to an accumulation of serum at the site of the incision. On February 13, an inflammation of the throat developed, and for some time afterwards she expectorated a bloody post-nasal discharge.

On February 25 she was readmitted to the Miami Valley Hospital. Three days later Dr. A. B. Brower was called in consultation. He made a clinical diagnosis of meningitis and confirmed it by lumbar puncture which yielded thick creamy pus. Short chain streptococci were found in the direct smear. Long chain streptococci and some diplococci were cultured. The physical signs were not unusual for such a condition. Ptosis of the left eyelid was observed. There was stiffness of the neck and Kernig's sign was present. Tendon reflexes were not well elicited. She was delirious and frequently picked at the bed clothing and at imaginary objects in the air. She complained of lumbar pain. Hemoglobin was 50 per cent (Dare). A leukocytosis was present. Blood culture was negative.

The prognosis appeared to be hopeless, but as a therapeutic gesture, 15 c.c. of antimeningococcic serum were injected intraspinally at the time of the diagnostic lumbar puncture. During the next two days, before the final report on the laboratory culture was obtained, the patient received 45 c.c of antimeningococcic serum intravenuosly and 10 c.c. of concentrated polyvalent antistreptococcic serum intravenously. A slight improvement in the patient's general condition encouraged me to again administer 10 c.c. of the antistreptococcic serum intravenously on March 2, 3 and 4. However, a severe chill developed about two hours after each dose and I decided that so long as clinical improvement continued to occur, I would omit the serum. On March 2 the head of the bed was elevated in order to favor gravitation of the pus toward the lower part of the spinal canal. This posture was continued throughout the course of the disease.

During the following three weeks, the patient's general condition appeared to be improved, but toward the end of the month the fever rose higher, she became more toxic and the outlook was less favorable. Lumbar puncture was done on March 31. Pus was again obtained. Long chain streptococci were seen on direct smear. By culture these were found to be hemolytic. The possibility of anaphylaxis prevented me from administering more antistreptococcic serum. It was finally decided to administer a course of vaccine. A streptococcic antigen, marketed under the trade name of "Immunogen" was chosen. Between April 1 and May 6 the patient received twenty-six *intradermal* injections of this preparation. The dose was graduated from 0.10 c.c. to 0.50 c.c. The plan was to administer a dose slightly smaller than that which would cause a local reaction. The patient's temperature slowly descended and remained normal after May 4. On June 13 a lumbar puncture was done. The specimen was contaminated with blood but was sterile. On June 26 the patient was discharged to her home.

In addition to the biologic therapy already outlined, it is well to draw attention to other features. During the early part of the hospital stay it was necessary to catheterize the patient many times. Methenamine was given as a urinary antiseptic, and later sodium citrate was given to change the reaction of the urine. Bladder control was normal after March 29. Because of the pyuria and upon the advice of Doctor Kislig the patient received daily bladder irrigations of boric acid solution followed by instillations of Neo-Silvol solution from March 29 to May 4. Pain in the back was relieved by frequent doses of codein. From April 10 to 30, sodium salicylate was given by rectum twice daily. I am sure that this was not well absorbed because the patient did not develop any auditory symptoms. Tonic treatment was begun early because of the anemia. Iron by mouth was given for two weeks in March. The patient did not tolerate cod liver oil so she was given the cod liver oil concentrate "Oscodal" three times daily from March 23 to June 26. Liver Extract No. 343 was given from April 9 to May 16. A high liver diet was provided from April 25 to June 26. On June 24 the hemoglobin was 80 per cent (Dare). The patient's convalescence at home was satisfactory. She was soon able to assume her household duties. Her mental condition was normal. At times she complained of pain in her back. An interesting side light is that she soon became pregnant. On April 27, 1929, she was delivered of a normal baby boy by Dr. L. B. Hurless.

Most cases of streptococcic meningitis reported

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in the literature are secondary to middle ear and mastoid infections, or are presumed to have the primary foci in the nasal accessory sinuses as in this report. Huenekens and Stoesser[1] (1927) report a case of a boy aged seven years, who recovered following mastoidectomy and saline irrigations of the spinal canal. They mention a report of a recovery recorded by McCarthy[2] who used normal human serum in 1917 and also recoveries reported by Walthall[3] (1918), Yerger[4] (1922) and Mygind[5] (1922)—details of treatment not stated. Weaver[6] (1919) reports a recovery following intraspinal and intramuscular injections of antimeningococcic and antistreptococcic serums. Neal and Jones[7] (1927) report a recovery following the use of antimeningococcic and later antiscarletinal serum intraspinally and intramuscularly. Vining and Thompson[8] (1924) of London report a recovery following intraspinal and subcutaneous injections of antimeningococcic serum. They also mention a recovery reported by Archer[9] (1922). In February, 1927, Dr. B. Delger[10] of Montevideo reported in detail the course of a patient age seven years, who recovered following mastoidectomy and the use of antistreptococcic serum intraspinally and intramuscularly. He also used a streptococcic vaccine. So far as I have been able to discover, his patient and the one reported in this communication have been the only ones who received both serum and vaccine therapy.

It is worth noting that serum of one kind or another was given to almost all patients who recovered. I have read with considerable interest the recent report on pneumococcic and streptococcic meningitis, by Dr. John A. Kolmer[11] of Philadelphia. He emphasizes the terrific mortality of both conditions and insists that vigorous treatment is indicated. His clinical observations together with the extensive experimental work on dogs in which he is now engaged will perhaps provide a better understanding of the therapeutic possibilities in these conditions.

1905 SALEM AVENUE.

REFERENCES

1. Huenekens, E. J., and Stoesser, A. V.: Streptococcic Meningitis of Otitic Origin: Report of a case, American Journal of Diseases of Children, May, 1927.

*2. McCarthy, F. P.: A Case of Streptococcus Meningitis Successfully Treated with Normal Serum (Human), Boston M. & S. J. 177: 621. (Nov., 1917).

*3. Walthall, D. O.: Recovery of a Case of Purulent Meningitis Complicating Mastoiditis, J. Michigan Medical Society, 17:102. (March, 1918).

*4. Yerger, C. F.: (1922). (Quoted by Huenekens and Stoesser).

*5. Mygind, Holger: Benign Forms of Otogenic Meningitis, Journal of Laryngology and Otology, xxxvii: 597. (April, 1922).

6. Weaver, Geo. H.: A Case of Acute Streptococcic Meningitis with Recovery, Jour. A.M.A. 72:1363. (May 10, 1919).

7. Neal, Josephine B., and Jones, Archbold: Streptococcic Meningitis following Scarlet Fever, with Recovery, Archives of Pediatrics xliv, No. 6. (June, 1927).

8. Vining, C. Wilfred, and Thompson, Herbert P.: A Case of Streptococcic Meningitis treated with Serum: Recovery, British Medical Journal, (October 11, 1924).

*9. Archer, (Quoted by Vining and Thompson): New York State Medical Journal xxii, 158-161.

10. Delger, B.: Meningitis a estreptococco post—escarlatinosa, Archives, Latino-Americanos, February, 1927.

11. Kolmer, John A.: Pneumococcus and Streptococcus Meningitis, Jour. A.M.A. (March 16, 1929).

* Original Reference not located by writer.

V. C. ROWLAND, M.D., Cleveland: By a strange coincidence I was just asked to see and have just come from a case of acute septic meningitis. The tube of milky spinal fluid which I hold in my hand was obtained less than an hour ago. The doctor stated that the patient, a man of about 50, well until last week developed an innocent appearing sore throat, then a spontaneous discharge from the left ear of blood serum, drying up in three days. Fever, headache and nausea then began and this morning he had definite neck rigidity and Kernig's sign. Lumbar puncture was done at once and all the fluid allowed to drain away slowly that could be removed and 30 c.c. of serum injected.

This treatment was started because a couple of years ago I had the unexpected good fortune of having a case of pneumococcus meningitis get well. The patient was a young man of 34, who was brought into the hospital with a fractured skull with spinal fluid escaping and deafness in one ear. He made a satisfactory clinical recovery from August 25 to October 6 and was discharged on October 30. He was readmitted with nausea, vomiting, headache, dizziness, leucocytosis (27000), herpes, neck rigidity; temperature, 40°; pulse, 130; and a spinal fluid that was grossly purulent with large numbers of pneumococci which were cultered and typed. Assuming that the case was hopeless, spinal drainage was started rather recklessly, all fluid being allowed to flow off as freely as possible and on two occasions polyvalent anti-pneumococcus serum injected. The latter, however, did not seem to have any particular effect. On one occasion under gas anesthesia a trochar was inserted into the spinal canal and a soft rubber catheter passed through it, the trochar then being removed and the catheter left 8 hours for drainage. Frequent drainages were then continued by spinal puncture and the spinal fluid began gradually to clear and the patient to improve clinically. He was kept under observation for a considerable period after symptoms had cleared and was discharged the following January 29 apparently quite well. He was seen a year later and was in good general condition.

The very interesting work of Dr. Kolmer in connection with experimental streptococcic and pneumococcic meningitis in dogs is very suggestive. He was able to save 60% of his dogs inoculated intra-cisternally with an almost constantly fatal type of infection by the use of intraspinal drainage and injection of 25 c.c. of pneumococcus anti-body solution containing 1 c.c. of 1 to 100 solution of ethylhydro-cuprein otherwise known as numoquin or optochin which undoubtedly has some specific toxicity for the pneumococcus. He later also used intra-arterial injections in the carotid arteries. This work has not been carried out in human beings. Dr. Kolmer also showed experimentally that spinal drainage did not tend to localize circulating organisms in the meninges and regarded the spinal puncture as harmless.

The main point I wish to emphasize in connection with all of these facts is that we should not regard every case of pneumococcus or streptococcic meningitis as absolutely hopeless but start vigorously by repeated and persistent spinal drainage combined with biological and chemical agents to combat the disease. If this is done, I think an occasional case may be saved.

Proptosis In Sinus Disease

DERRICK T. VAIL, JR., M.D., Cincinnati

THE subject of proptosis covers a great variety of causes. It has been well described many times. Before proceeding to a discussion of proptosis as a result of sinus disease, I should like to present a classification of this symptom which was given at Oxford University, England, during the ophthalmological course there. It has been of great assistance to me.

One must first decide whether the proptosis is true or apparent. (I) Apparent proptosis—protrusion of the lids either (a) as a result of fat (b) familial feature or (c) assymetry of face. In addition there may be protrusion of lids and edema but no true proptosis as a result of (I) ocular causes—iritis, a glaucoma (2) inflamed condition of lid—chalazion, hordeolum, lid abscess, lacrimal abscess, frontal sinusitis, periadenitis, trauma, insect stings, trichinosis and urticaria.

True proptosis—Monocular or binocular.

A. *Rapid, with edema of lids.*
   1. Glaucoma, iridocyclitis, panophthalmitis
   2. Cellulitis of orbit
   3. Tenonitis, serous or purulent
   4. Thrombosis of cavernous sinus
   5. Hemorrhage
      (a) Blow (b) Spontaneous — as in scurvy, anemia, rickets, hemophilia.

B. *Gradual—without edema*
   1. Congenital—malformation of the orbit
   2. Ocular enlargements
      High myopia, buphthalmos, sarcoma of choroid perforating posteriorly.
   3. Paralysis of third nerve with loss of muscle tone and after tenotomy.

4. *Unilateral proptosis with central displacement*
   1. Grave's Disease
   2. Vascular causes
      (a) Arterio-venous aneurysm, or pulsating exophthalmos
      (b) Varicose orbital veins
      (c) Circoid aneurysm orbit
      (d) Nevi
   3. Tumors of optic nerve
   4. Cysts in orbit—echinococcus
   5. Growths
      (a) Benign—as a plexiform neuroma
      (b) Malignant
   6. Foreign bodies
   7. Dilatation of accessory sinuses.

5. *Unilateral proptosis with lateral displacement*
   1. Mucocele from sinus
   2. Neoplasm from sinuses
   3. Exostosis from wall of orbit
   4. Periostitis of orbital wall
   5. As result of nasal surgery
   6. Meningocele
   7. Emphysema of orbit

6. *Binocular Exophthalmos.*
   (a) Congenital
   (b) Tower skull
   (c) Grave's Disease
   (d) Sarcoma of ethmoid
   (e) Double sinusitis
   (f) Neuro figromate
   (g) Cavernous sinus thrombosis.

This paper will be limited to a discussion of a few cases of sinus disease with unilateral proptosis, and will cover some of the diagnostic points in question.

Frontal sinus disease, according to text books, ranks first as causing most orbital trouble. Next antrum, then ethmoid and finally sphenoid. When frontal sinusitis spreads to the orbit it produces ocular proptosis displacing the eye down and out as a rule. When the purulent process is subperiosteal however, the pus gravitate backward and form a bag behind the globe, displacing it directly forwards. The following case emphasizes this point.

CASE REPORTS

Case I. H. L., age 10, was seen by Dr. Vail, Sr., in consultation with Dr. Mithoefer on April 8th, 1926. Five days before he complained of pain in the left side of face. Dr. Mithoefer found pus coming from the middle meatus. Two days later the left eyelids became inflamed and in a short time the eyelids were swollen shut. Examination showed marked tenderness under the left eyelid and fluctuation of the swelling under the brow. There was marked proptosis and edema of the left eyeball. The proptosis was *straight forwards.* Motility was markedly restricted in all directions and there was diplopia. The media was clear, but the optic disc was congested and the veins dilated and dark. The field of vision was normal, and although colors could be distinguished, they were darker when seen with the left eye. On April 9th under ether anesthesia, a large incision was made under the left brow, nothing was found. The incision was continued through the periosteum and a probe passed along the roof of the orbit. An enormous gush of foul pus was the reward. There was no opening found in the bone connection with the frontal. Recovery was uneventful.

The following case reveals the importance of a correct diagnosis:

Case II. Miss M. A., age 50, was seen on Jan. 19th, 1926. She complained of a swollen painful left upper lid—11 days duration. It began as a small swelling beneath the brow and slight diplopia. The lids became boggy and tender and in a short time she was unable to open her eye. The preauricular glands then became swollen and tender. The history of her condition before onset is most instructive. In June, 1925—7 months previously, she had slight swelling of both eyelids and slight edema of the left eye. No headaches. She was treated for *eye strain* and kidney trouble for 4 weeks by an ophthalmologist. In Nov., 1925, she had a recurrence of the swelling and a diagnosis of *thyroid disease* was made by the local doctor. At this time she had her first attack of diplopia and she noticed that the left eye pro-

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Fig. 1. Case II. Subperiosteal abscess, frontal sinusitis.

truded slightly. She has had for as long as she could remember, nasal catarrh and purulent nasal discharge. Examination January 19th showed chemotic left lids, slight proptosis down and out, some disturbance of motility up and out and blurred images on looking up and towards the left. There was a decided preauricular adenitis on the left side. *X*-rays showed clouding of the sinuses. January 20, 1928, Dr. H. H. Vail performed a left Killian radical antrum and ethmoid exenteration. Five days later, the eye could be opened and recovery was uneventful. (Fig. 1.)

Mucocele of the frontal sinus is relatively a common affair. This case is rather unusual in its chronicity and marked functional disturbance with complete recovery following operation.

Case III. Mr. W. B., age 37, first seen April 24, 1926. He complained of bulging and displacement of the right eye since October 1, 1925. The disturbance began with a half moon cloudiness in



Fig. 2. Case III. Mucocele frontal sinus before operation.



Fig. 3. Case III. Mucocele frontal sinus after operation.

the lower field of the right eye. Occasional diplopia which was getting worse. No pain unless the upper lid became caught behind the eye-ball which occasionally happened. The proptosis had not increased since October 1, 6 months before admission. (Fig. 2). The left eye had always been myopic and vision poor. Examination showed such a marked degree of exophthalmos that the globe hung over the lower rim of the orbit. The eye was displaced down and slightly out, so that the margin of the lower lid was on a line with the upper margin of the cornea. A pulpy mass could be felt in the upper outer quadrant and behind the eyeball. The motility was only affected directly upwards. Vision was 20/50 and no abnormal condition was apparent in the eye. *X*-ray August 24, showed break in outer margin of right orbit which lead into a large cavity to the right of the frontal sinus. (Fig. 4). September 2nd, nearly a year after onset, a large mucocele of the frontal sinus was removed through an eyebrow incision, by Dr. H. H. Vail. When last examined, May 14, 1928, vision in the right eye was 20/20 and there was no ocular defect, either muscle or field. (Fig. 3).

The maxillary sinus as an offending agent in producing orbital disease, comes next in importance. This case shows that in children suffering from an acute exenthematous disease, infection in an antrum can spread to the orbit. It often produces serious results, blindness and meningitis, as is well known. This one terminated more fortunately and emphasizes the point of early draining of an infected sinus in such diseases.

Case IV. J. G., age 5, was seen on October 25, 1928. He had scarlet fever of 11 days duration. The right eyelids were inflamed and swollen, and the globe proptosed, for the past two days. The night before I saw this child Dr. C. Jones of Cincinnati had found a severely infected right antrum. Under ether anesthesia he opened and drained this sinus, and the next morning, thick strings of bloody mucoid pus were coming from the right nostril. The eyelids were swollen and the eye moderately proptosed. There was decided limitation of movement. No area of fluctuation could be palpated, and it was considered best to watch and wait, since the antrum was draining so freely. Consequently hot compresses of magnesium sulphate and sodium chloride solution were applied continuously, and a mild collyrium instilled four times a day. The next day there was some slight improvement. An acute conjunctivitis with subconjunctival hemorrhages had taken place. This cleared up in a few days. The following morning fluctuation was felt immediately below the eyeball and preparations made to incise the periosteum. But motility was normal in all directions except below and the child's temperature was nearly normal. We waited until evening, continuing the compresses, and found then that the swelling had markedly decreased. The next morning all the alarming ocular symptoms had subsided and motility was normal in all directions. The antrum drain had been removed two days after the operation and the drainage of thick pus had gradually subsided.

The next three cases of malignancy of the orbit presented many points of diagnostic difficulty.

Case V. Mr. O. N., age 52, entered February 11, 1928, complaining of pain in his head, 2 months duration, bulging of the left eye, and loss



Fig. 4. Case III. X-ray frontal sinus showing bone defect.

of vision. In August, 1927, polypi were removed by his physician. Two months ago he had a slight pain behind the left eye, which gradually became worse. Some pus drained from left nostril and his local physician performed a second nasal operation, the details of which are unknown. The symptoms became worse. Five weeks ago the left eyelids became swollen and painful and the eyeball began to bulge forwards. Three weeks ago the eye became totally blind.

Examination showed the right eye to be normal. The left eye proptosed a few mm. There was a ridge of edematous conjunctiva in the palpebral fissure below. (Fig. 5). The eyeball was proptosed *directly forwards*, and there was no motility. The disc was pale and edematous on the nasal side and there was no light perception. The temperature was normal. An *X*-ray picture showed clouding of the left antrum, and ethmoid dense enough for fluid.

Because of the normal temperature, gradual loss of vision, optic atrophy and propulsion of the globe *directly forward* with loss of all motility, a diagnosis of neoplasm in the muscle cone was made, and preparations for an orbital exenteration were instigated. The next morning his temperature rose to 102° F. following a sharp chill. A large sweeping incision was made along the orbital rim through the periosteum. A large amount of greenish pus welled up and I had a serious doubt as to the malignancy of the condition. The knife encountered porky gritty tissue however, and the amount of pus obtained was very small, not affecting the proptosis in the least. Since the eye was blind, exenteration was carried out and it was seen that the medial wall of the orbit was necrotic and oozing pus. The tissue behind the eyeball was hard and looked like new growth on sectioning. The next day Dr. H. H. Vail performed a left radical antrum and ethmoid through the orbit. A cupful of tumor tissue was removed. There was much loss of blood. The naso-antral wall was destroyed by tumor tissue and there was pus and straw colored serum in addition. The specimen showed a spindle cell sarcoma. The patient died of cerebral metastases two months later.

Case VI. Mrs. W. B., age 45, entered August 4, 1928, complaining of swelling, pain and blindness right eye, 10 days duration. Five months ago had first right upper molar extracted. The next morning the right eye became injected and swollen. The right side of her face was also swollen. A few days later an *X*-ray picture showed an unerupted tooth in right upper jaw which was extracted a few weeks later. Since then she had suffered a great deal of pain and discomfort. Two weeks before admission her eyeball pushed forwards and was greatly inflamed. Leeches were put on and a few incisions made, but no pus found. A nasal operation was performed and pus evacuated. Four days before admission the right eye became blind. Examination showed tremendous chemosis and edematous swelling. (Fig. 6-7). The eyeball was proptosed directly forwards with limitation of movement in all directions. The whole fundus edematous, vessels dilated and tortuous, and the optic disc atrophied. Vision nil. Examination of the nose by Dr. H. H. Vail revealed the right side to be filled with pus. There was tender adenitis in the right cervical region. *X*-ray showed clouding of the right antrum. A diagnosis of orbital abscess secondary to antrum infection following diseased teeth was made. August 6, Dr. H. H. Vail performed a right external ethmoid and radical antrum operation. There was necrosis of the ethmoid paper plate and roof of the antrum. Pus drained from the orbit through the antrum. The latter was filled with polypi or malignant tissue, and there was unusually profuse bleeding.

The removed tissue was sent to the Langdon Meyers Laboratory, who reported, "Small round cell, rapidly growing sarcoma." Four days later the right orbit was exenterated, the orbital floor and nasal wall removed. All the tumor tissue in sight was excized and the growth was found to be extending down into the soft structure of the cheek and below the zygoma. Needless to mention that the patient died two months later of general metastases and cachexia.

Later there came to our attention a patient presenting many diagnostic points similar to the above two cases and is included to show the difficulty in diagnosis encountered.

Case VII. Mrs. E. S., age 63, was referred by



Fig. 5. Case V. Spindle cell sarcoma of antrum, invading orbit.





Figs. 6 and 7. Case VI. Round cell sarcoma of antrum invading orbit.

Dr. Hoppe for bulging and swelling of the right eye, 3 months duration. We first saw her October 9, 1928. Three months ago the right upper lid drooped and the eye bulged forwards rather suddenly. No history of diplopia. The vision was good. The eyeball was tender on pressure. The blood Wassermann negative.

In January, 1927, she noticed a steady, and at times severe pain in the right cheek. In May, 1927, she had all her teeth withdrawn without relief of pain. For about a year she was unable to blow her nose through the right side, but there was never any discharge of pus or blood. During the past year, she has lost about twenty pounds, and has become weak.

Ocular examination revealed a marked proptosis, about 30 mm., of the right eyeball, with upward deviation of about 10 degrees; (Fig. 8). Ptosis of the lid probably mechanical, and no ocular motion downward beyond the horizontal midline. (Fig. 9).

The rest of the muscular excursion was limited and the muscle field showed diplopia, on elevating the lid, in all parts except the upward center. A firm mass could be felt below the eyeball especially on the temporal side. The eyeball was free of congestion, and there was some edema in the lower nasal portion. Vision 20/40 and the field normal. Optic disc normal. Conjunctival and scleral veins in extreme temporal portion dilated and engorged. *X*-ray showed clouding of the right antrum. Nasal examination showed the right antrum dark on transillumination. Our diagnosis was malignant disease of the maxillary sinus invading the orbit.

The next day under ether anesthesia, my brother opened the right antrum which was found to contain numerous polypi of the usual form. The roof of the antrum was exposed and no break in its continuity discovered. By retracting the cheek and elevating the periosteum of the floor of the orbit, no tumor tissue was found, indicating that the tumor was entirely orbital.

I then exenterated the orbit and found a large neoplasm the size of a pigeon's egg growing from the orbital floor and attached to the eyeball below. Sections of this growth revealed it to be an epidermoid carcinoma. Incidentally after exenteration many of the ethmoid cells showed polypi which were removed.

COMMENT

In the diagnosis of proptosis and its etiology, we must consider, *first* if there is a true proptosis. This can best be determined by looking down from above along the plane of the forehead.

Second, how much proptosis is there? The Hertel exophthalmometer is a valuable instrument; unfortunately one can get a variation of a few mm. so easily that the readings are relative. I understand there is a new model on the market, of which we have had no experience. It occurred to me lately that proptosis can be measured with the slit lamp and Ulbrich drum, by focusing down upon the epithelium of the cornea, and setting the scale at zero. The instrument is then swung over on the other eye, care taken that the patient does not move and the focus readjusted. The scale on the drum will then give the degree of proptosis in mm.

Third—The direction in which the proptosed eye deviates is a valuable though not infallible guide to the situation of the lesion. If the eye is directed straight forwards without deviation, look for trouble in the muscle cone; down and out, investigate the frontal sinus; upwards, suspect the antrum; and down and somewhat inwards, the ethmoids.

Fourth—The X-ray picture is of great value and requires no comments.

Fifth—The active cooperation between the ophthalmologist and laryngologist is perhaps the most important of all points. I believe that all cases of proptosis, especially the unilateral type, should be carefully studied by the laryngologist as well, and operation performed by both, each assisting the other.

Sixth—Finally, one must not overlook the importance of a most careful history taking, in all cases of proptosis.

24 EAST EIGHTH STREET.

DISCUSSION

CHARLES LUKENS, M.D., Toledo: I am sure we are under obligation to Dr. Vail for his encyclopedic presentation of proptosis. Many of us will place his reprint in our Fuch's for ready reference—it is the most complete outline I've seen. I can not help quoting a portion of his fifth conclusion: "The active cooperation between the ophthalmologist and laryngologist is the most im-





Figs. 8 and 9. Case VII. Primary Carcinoma of orbit.

portant of all points. . . . That all cases of proptosis, especially the unilateral type, should be carefully studied by the laryngologist as well, and operation performed by both, each assisting the other". This is certainly the kernel of this paper and the key of the success he has demonstrated in treatment, and emphasizes the insufficiency of ultra-specialism. The diagnosis and successful treatment here attained would be impossible by an ophthalmologist alone, unless he had been also specially trained in rhinology. Proptosis from accessory nasal sinus disease is really the laryngologist's case. The crux of the matter is in the etiological diagnosis.

You will pardon this personal reference; thirty years ago I was resident surgeon in Wills Eye Hospital in Philadelphia. At that time the staff included most of the best known ophthalmologists of that city, the men who had helped "to make Philadelphia famous". These men knew the literature from Hippocrates to date; they had written text books, and scarcely an article appeared in any American ophthalmological journal, without one or more references to some of this staff. They prided themselves on being ophthalmologists only, and looked with pity and a smile on all who assumed to practice eye, ear, nose and throat. They considered such a man's ophthalmological worth much below par. I have notes of six cases of proptosis, treated by this staff at that time. Of these six cases, the etiological diagnosis was 100 per cent wrong, as shown at operation. One case was a fronto-ethmoid, that had been diagnosed sarcoma of the orbit. Four were ethmoidal, two of which had had a preoperative diagnosis of orbital tumor, another had been diagnosed a dermoid cyst, and the fourth was supposed to be an antrum case and was so operated upon in a most weird way. They infected a healthy antrum and never did reach the source of the pus. The last case had been diagnosed abscess of the orbit, and it proved to be a dermoid.

But the ophthalmologist is not the only sinner. Some years ago I was working in a clinic where a proptosis case came into dispute. The laryngologist claimed it was his, that the case must be of accessory sinus origin, in spite of negative rhinological and *X*-ray findings. Finally I was permitted to operate on the case in the laryngologists presence, and removed a beautiful angioma, the size of a pigeons egg from the orbit. The recovery was perfect and prompt.

A. B. BRUNER, M.D., Cleveland: Dr. Vail has given a very excellent résumé of the many causes producing proptosis. I think we should add, however, to the vascular causes of proptosis the condition of angiectasis. A number of cases have been reported. More recently by Sanders, in the *British Journal of Ophthalmology*, March, 1928, is described in detail two cases of angiectasis orbita due to polycythemia vera. This condition, although uncommon, is of importance in that there was proptosis of the globe, limited movement of the eyeball, and dilated and tortuous scleral vessels,—a picture very suggestive of an acute glaucoma.

Another cause of proptosis, which is receiving more and more importance at the present time, is meningioma. Although usually given as a cause of proptosis with lateral displacement, this is not always the case, and displacement may be straight forward. It has been our opportunity to see several of these cases in this city in the last few years, and Dr. Harvey Cushing, of Boston, has reported a number of cases of meningioma with proptosis as a prominent symptom.

The second part of Dr. Vail's paper, covering the report of his cases, I have found of great interest because taken as a whole, they illustrate the very variable symptom complex, which is very often found in this condition. Practically every symptom of any importance appears in one or more of these cases. A great deal of stress always has been placed upon the importance of disturbance of motility as a symptom in the proptosis due to sinus disease. One should not, however, place too much reliance on such a symptom, as perfectly normal movement of the eyeball in all directions may frequently be found with an acute inflammatory process in the posterior part of the orbit.

The author states that he finds the *X*-ray picture of great value. In regard to this, your discussant must disagree. I believe the *X*-ray picture only of value where it shows positive evidence of orbital disturbance. In the presence of a negative *X*-ray, exploration is always justified, and if properly done is accompanied by very slight risk. I want to draw attention to the fact that an exploratory puncture should never be made through the conjunctiva but always through skin and subcutaneous tissue and along the orbital margin. A valuable aid to diagnosis for the presence of

typical symptoms of orbital cellulitis with negative *X*-ray findings, is a careful blood count.

The speaker feels that in early cases of sinus infection with beginning involvement of the orbit, careful examination by a rhinologist is essential. The absence, however, of definite findings in the nose should not carry too much weight. Our experience has been that the rhinologists are apt to err on the side of conservatism. We believe that early surgical intervention is the best treatment; and if earlier operative measures are performed, it will both shorten the time of the patient's disability and prevent permanent injury to the structures of the eye.

Infection of the Upper Urinary Tract In Pregnancy

P. A. JACOBS, M.D., and WM. ROSENBERG, M.D., Cleveland

IT is not our purpose to present an exhaustive treatise on infection of the urinary tract as it occurs in pregnancy; covering its history, statistics, theories and experimentations; but rather to present to you a brief survey of the practical phase of this subject as it applies to every day practice of obstetrics.

Infection of the urinary system is the most frequent complication in pregnancy. This is not to be wondered at when we consider that the majority of pregnant women at some time during their pregnancy have pus in their urine. In 872 admissions for pregnancy in 1928, 581 or approximately 68 per cent had W.B.C. in their urine during their stay in the hospital, the amount varying from a few to innumerable cells.

The changes found in the urinary tract in this complication of pregnancy, were from a clinical standpoint little understood until quite recently.

The urological findings in practically all cases examined by us, showed changes in the form of dilatations of one or both ureters and pelvis, angulations, kinks and strictures which were either spastic or organic and ptosis; as well as congenital deformities.

All cases showed evidence of pressure on the posterior wall and fundus of the bladder and congestion of the mucous membrane especially at the trigone. This change in the bladder was due to the enlarged pregnant uterus.

The anatomical changes which are found in these cases are potential factors in the causation of infection, and they may take place during pregnancy, or they may be present before pregnancy.

The physiological changes in the pelvic contents during pregnancy, namely, congestion and changes in the normal anatomical relation of the pelvic contents, plus the pathological changes in the urinary tract which are usually present, interferes with the urinary flow from the kidney. This change from the normal causes a condition of urinary stasis and ultimately infection. An added factor which might be responsible for an infection, is the trauma which the bladder suffers during labor.

As a result of the frequency of these findings, we advocate discarding the term "Pyelitis in Pregnancy" and in its place use the term "Infection of The Urinary Tract in Pregnancy", as this applies more generally to the urological findings.

Our observations have convinced us that these infections may take place either before or after delivery and often as early as the third or fourth month, and that many of the dilatations and angulations that are present are congenital in origin. Furthermore, previous infection of the urinary tract, especially the pyelitis of childhood we feel, must play an important role in some of the cases of urinary tract infection in pregnancy.

SYMPTOMS

Frequency, burning, pain in the lumbar region, or even abdominal pain; fever, chills, and pyuria are the characteristic signs which should make one suspicious of this condition.

DIAGNOSIS

The symptoms and physical findings in these cases can only make one suspicious of the presence of urinary tract infection. The only means of making a positive diagnosis is by cystoscopic and allied examination. This diagnostic procedure is advocated by us in all cases which do not respond to the usual treatment for this condition, because we believe that pyelitis as an entity in pregnancy, without some anatomical change in the urinary tract, is not as common as we have been led to believe. In fact we believe it is rather rare.

TREATMENT

While we admit that most of the cases will get well under the usual form of treatment, such as rest in bed, drinking large quantities of water, and the ingestion of so-called urinary antiseptics, we nevertheless feel that convalescence is much more prolonged by this method of treatment than when ureteral drainage and renal lavage is instituted. By this latter method it is unusual not to see an immediate improvement in the patient's general condition, as well as a rapid decline in temperature; this often occurring after the first lavage.

Read before the Section on Obstetrics and Pediatrics, Ohio State Medical Association, at the 83rd Annual Meeting, Cleveland, May 7-9, 1929.

From the Urological Service of Mt. Sinai Hospital, Cleveland.

In conclusion we wish to leave with you the following impressions:

1. Pyelitis in pregnancy as an entity is extremely rare and the term should be discarded.

2. Practically all cases of urinary tract infection in pregnancy show definite anatomical changes in the urinary tract, many of which have no relation to the pregnancy except that the existing condition is aggravated during this period.

3. The longer infection in the urinary tract is permitted to go on, the more certain are we to get irrepairable damage to the upper urinary tract as a result.

4. All cases which do not respond to the usual treatment within a few days, should be cystoscoped for diagnosis and lavage.

5. Cystoscopy in cases of pregnancy is a perfectly harmless procedure and in proper hands has never caused the slightest symptom which might interfere with the pregnancy.

3912 PROSPECT AVENUE.

DISCUSSION

F. W. HARRAH, M.D., Columbus: Dr. Jacobs has indeed presented a very interesting and instructive paper, and has corroborated his statements by lantern slide demonstration.

We employ the term, "Pyelitis of Pregnancy," in most of these cases, but I am of the opinion that the term "Pyelonephritis" should be used more frequently, since pathological studies show that often there is not only an infection of the renal pelvis but some degree of involvement of the parenchyma itself. There has been much discussion in regard to the etiology of these cases that an acute exacerbation of a pre-existing low grade pyelitis cannot be denied, probably aggravated in many cases by pressure of the fetal head. Ptosis of the kidney, pre-existing ureteral strictures, calculus, etc., favoring back pressure and stasis, undoubtedly play an important role.

I wish to report a case in which it seems that the pressure of the fetal head was responsible for the condition.

A young woman, aged 20, and seven months pregnant, was referred to me for urological study, because she had been having pain in the right kidney region with frequent attacks of chills and fever and pus in the urine ever since the fourth month of pregnancy. All the usual forms of internal medication had been used without avail. At the time I saw her she looked septic and had a temperature of 104.2 degrees. She stated that in spite of her pregnancy there was a constant loss of weight during the past three months. The right kidney region was exquisitely tender in the costo-vertebral angle; a large abdominal mass was felt,—the fetus. There was considerable pus in the urine.

Cystoscopy revealed much free pus floating about in the bladder medium; the bladder mucosa was congested, and in the region of the right ureteral orifice there was much edema. Upon passing the No. 10 French catheter to the kidney pelvis there was a sudden gush of pussy urine. This actually flowed through the catheter, and the patient experienced immediate relief. This condition, of course, was significant of back pressure and poor drainage.

The functional capacity of the right kidney was one-fifth that of its fellow. Cultural examination of the urine showed colon bacillus infection in the right kidney and bladder. The urine from the left kidney was sterile.

A pyelogram was made on the right side and showed the renal pelvis to be very large with blunting of the major and minor calices. The upper third of the right ureter was dilated above a sharp S-shaped angulation of the ureter. The *X*-ray showed the outline of a seven months fetus,—a breech. The head of the fetus was directly over the upper ureter and renal pelvis, and as seen surely appeared to obstruct the right ureter and create stasis.

I shall probably be criticized for pyelograming this case, but I felt justified in view of the fact that I could reach the renal pelvis with a catheter, and hence was able to thoroughly drain off the sodium iodide and lavage the renal pelvis with sterile distilled water.

This patient felt much better at once; the pain and temperature subsided, the right ureter was dilated and the renal pelvis lavaged twice weekly until term. She was delivered by Dr. Inglis, a breech presentation, a nine pound boy baby.

Pyelographic examination of the right kidney and ureter two months after the patient left the hospital revealed the kidney to be normal in function and size,—the angulation of the ureter and the renal infection were not present.

I mentioned this case to corroborate the findings of Dr. Jacobs, and to again emphasize the fact that a great number of our so-called cases of pyelitis of pregnancy are temporarily brought on in many instances by toxemia, mechanical factors, bladder reflux, etc., and when the condition is stubborn and will not yield to routine medication cystoscopy is indicated for accurate diagnosis, and ureteral dilatation and renal pelvic lavage instituted for maintenance of free drainage.

Research and Medical Progress and other addresses. By J. Shelton Horsley, M.D., Attending Surgeon, St. Elizabeth's Hospital, Richmond, Virginia. The C. V. Mosby Company, St. Louis.

Outline of Preventive Medicine. For Medical Practitioners and Students. Prepared under the auspices of the Committee on Public Health Relations, New York Academy of Medicine. 21 contributors. Editorial Committee, Frederic E. Sondern, M.D., Charles Gordon Heyd, M.D., and E. H. L. Corwin, M.D. Paul B. Hoeber, Inc., Publishers, New York.

A Textbook of Physiology for Nurses. By William Gay Christian, M.D., Professor of Anatomy, Medical College of Virginia, and Charles C. Haskell, B.A., M.D., Professor of Physiology and Pharmacology, Medical College of Virginia. Second edition. The C. V. Mosby Company, St. Louis.

Beginning this year the American Association for the Study of Goiter will award a cash prize of $300 annually for the best original thesis dealing with some phase of the goiter problem. These should be submitted by June 1, to Doctor Walter M. Simpson, Chairman of the Essay Committee, Miami Valley Hospital, Dayton, Ohio. The award will be given immediately following the coming meeting of the Association which is to be held in Seattle, Washington, July 10-12, 1930.

Poison in the Shoe Industry

C. L. FERGUSON, M.D., Portsmouth

POISONS in the shoe industry cause less symptoms and disability to employes than might be expected. In fact, there is a prevalent, erroneous belief expressed by both the laity and a number of physicians that the mere working in a shoe factory begets what is commonly called leather poisoning, but the writer fails to find any scientific proof for such a belief. In answer to my inquiry, Dean K. Brundage, assistant statistician of the United States Public Health Service, states that there appears to be a lack of evidence substantiating the proof that people making shoes become poisoned to any great extent. He further stated—"So far as I know there have been no reports of such cases from sick benefit associations or from industrial medical departments which forward reports of the nature of disabilities causing absence from work. Our librarian reports that there are a number of articles discussing shoe dyes and their effect upon the wearer of shoes, but only slight mention of shoe dyes and their effect upon the workers."

Another source of reliable information was from Dr. Daniel O'Neil, of the Endicott Johnson Corporation, Binghampton, New York. This company employs annually an average of 17,000 employes and it operates its own tanneries in addition to the making of shoes. Dr. O'Neil claims that neither he nor his staff of 28 physicians have ever identified a case of leather poisoning. Their workers often claim that an irritation of the skin on the hands and face is due to leather poisoning, but he says—"We have yet to be convinced that leather is the causative factor. There is no leather poisoning in our tannery, in which several thousand are employed and no such poisoning is listed by the New York Industrial Commission."

While there is a lack of any great amount of evidence of poisoning in the shoe industry, there is, however, evidence of skin irritations, bronchial irritations and mild symptoms of poisoning in susceptible individuals. In shoe repair shops, which are outside the shoe industry proper, but closely allied to it, we find reported in medical literature severe cases of poisoning, even death.

In order to get a mental picture of the shoe industry, we must visualize over 1300 factories in the U. S. employing daily 204,000 men and women who make approximately 365 million pairs of shoes annually; tanneries which convert into leather the skins of thousands of animals and reptiles daily; the dyeing of leather, the manufacture and remodeling of lasts, the cutting and assembling of leather, and the place of glues, cements, solvents and cleaners.

The poisons and chemicals used in the production of leather in the tanneries are alum, lime, sodium chloride, carbolic acid, tannic acid and various oils. Those used in connection with the manufacture of shoes are acetone, formaldehyde, wood alcohol, camphor, dyes and proprietary preparations for the cleaning of shoes.

PERSONAL OBSERVATIONS

During the past seven years, the writer has observed symptoms of a mild form of poisoning due to the air in the room being impregnated with the fumes from acetone. This poisonous solvent was used to dissolve celluloid in box toes. Apparently, only susceptible individuals were affected. They complained of headache, dizziness and loss of appetite. With the establishment of better ventilation and finally the elimination of this process, the symptoms disappeared entirely.

In a department where old lasts are repaired, susceptible workers have been observed with a dermatitis on the hands and face. Some develop a mild form while others have a dermatitis resembling severe ivy poisoning. The sawing, filing and sanding of these lasts, which are made of maple wood repaired with glue, causes a dust which acts as an irritant. The glue is the active principle in these cases. A leave of absence for two weeks, or a transfer to different work will effect a complete cure.

In the cleaning department where dyes are used, the writer has noticed on operators' hands an occasional case of skin irritation resembling weeping eczema. The dye has always been the exciting factor. Treatment never affects a cure while the operator remains on the job.

I agree with Thompson who says—"The cutting, scraping, trimming and polishing of leather begets much dust, which, moreover is sometimes impregnated with dye stuffs and preservatives used in tanning. As a result, this dust combined with frequent poor ventilation leads to irritation of the larynx and bronchi."

DYE POISONING

The most toxic poisons are used in shoe repair shops. These shops are not a part of the shoe industry, but since they deal with shoes, we should be better informed about the seriousness of these poisons.

A survey of medical literature furnished by Nelson's Medical Research Bureau gives a very interesting account of nitrobenzene and analin poisoning. These substances are used in dyes which in turn are applied to old shoes. If the shoes are worn within 24 hours after the dye has

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Medical and Personnel Director, Selby Shoe Company.

been applied the wearer may experience severe symptoms and even death.

Children seem to be especially susceptible to this poison. Its effect is insidious and the immediate source of the trouble is generally overlooked. The public is totally uninformed of the fact that toxic materials can be absorbed through the intact skin and produce serious poisoning without causing any local manifestation.

The most important symptom is cyanosis without apparent cause in a previously normal person. Other symptoms that have been observed are heart block with arrhythmias, bleeding from the urinary tract, low blood pressure, basophilic granules in the red corpuscles, nausea, and dizziness.

Post mortems have not revealed anything except chocolate colored blood.

The treatment recommended in these cases is to remove the shoes immediately, put patient to bed by an open window, give plenty of water, sponge bath, bathe feet frequently, give a purgative and place an ice cap to head. In favorable cases, it is reported that the symptoms entirely disappear in one to three weeks.

As a preventive measure—dyes with nitrobenzene and analin should be replaced by nontoxic solvents. If these dyes are used, the shoes should be aired for several days before being worn.

SUMMARY

1. There is a lack of evidence that shoe workers experience any serious poison symptoms.

2. Leather poisoning is an erroneous belief without scientific proof.

3. Acetone will produce mild symptoms in a poorly ventilated room.

4. Skin conditions are frequently due to irritants.

5. The most toxic poisons are found in shoe repair shops.

BIBLIOGRAPHY

Thompson. Department Commerce, Washington. Occupational Diseases—P. 643, Apr. 13, 1929, report on Census of Boot and Shoe Manufacturers, 1927.

Aikman, J. Shoe Dye Poisoning; 3 Cases. AM. J. Dis. Child. 35:1038, 1928.

Albert, H. and Wallace, J. Five Cases of Shoe Dye Poisoning. J. Iowa M. Soc. 17:225, 1927.

Cloud, R. E. Shoe Dye Poisoning, J.A.M.A. 78:280, 1922.

Haft, H. H. Hematuria Due to Shoe Dye Poisoning. J.A.M.A. 90:742, 1928.

Hamilton, A. Industrial Poisons in the U. S. N. Y. Macmillan Co., 1925.

Levin, S. J. Shoe-Dye Poisoning. J. A. M. A. 89:2178, 1927.

Malden, W. Some Observations on Conditions of Blood in Men Engaged in Aniline Dyeing, J. Hyg. 7:672, 1907.

Muehlberger, C. W. Shoe Dye Poisoning. J. A. M. A. 84:1987, 1925.

Patek, A. J. Aniline Shoe Dye Poisoning. J. A. M. A. 86:944, 1926.

Reynolds, H. I. Report of a case of cyanosis due to shoe dye poisoning. J. A. M. A. Georgia 13:348, 1924.

Schmitt, O. J. Hematuria from Shoe Dye Poisoning; Case. J. A. M. A. 91:726, 1928.

Sheldon, S. A. Case of Shoe Dye Poisoning, J. Mich. M. Soc. 24:610, 1925.

Shinabery, L. Poisoning from Shoe Dye. J. Ind. M. A. 20:296, 1927.

Ullmann, H. Cyanide Poisoning from Shoe Cleanser. Deutsche Med. Wchnschr. 52:451, 1926. Ab. J. A. M. A. 86:1589, 1926.

Young, A. G., Muehlberger, C. W., and Meek, W. J. Experimental Studies of Acute Aniline Poisoning. J. Pharmacol. & Exper. Therap. 27:101 (March) 1926. Young, A. G.; Hematologic Studies of Aniline Poisoning, ibid., p. 125. Young, A. G., and Wilson, J. A.: Toxicologic and Hematologic Studies of Acetanilid Poisoning, ibid., p. 133.

DISCUSSION

PAUL A. DAVIS, M.D., Akron, O. Dr. Ferguson has presented a very informative paper and I am pleased to hear him state that leather poisoning is a misnomer. Any poisoning which may develop is not due to the leather but to the ingredients used in the preparation of the finished product for the market. Rubber poisoning is another misnomer for rubber itself is non-poisonous.

Dermatitis may develop in tanners who use potassium bichromate and muriatic acid. Chrome ulcers may develop, but this is very uncommon if proper supervision is instituted. Analin or analin dyes as used in the staining of leather and the repairing of shoes is probably the most penetrating of all substances. In a paper which I published in the *Journal of Industrial Hygiene* in 1921 there is a case cited that was fatal from shoe dye. Many other solvents are used in the rubber boot and shoe industry such as benzol, carbon disulphide, amyl acetate, carbon tetrachloride amyl alcohol, gasoline and methyl alcohol. Any of these solvents are poisons if in a concentrated form.

Dr. Ferguson has emphasized the fact that proper ventilation is very necessary. When any dusty or volatile substances are used proper ventilation will abort your poison cases.

I want to commend Dr. Ferguson on his paper and for your own information he has prepared a wonderful list of references.

Renal Tuberculosis*

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SURGICAL lesions of the upper part of the urinary tract are for the most part readily recognized clinically through the employment of the cystoscope and its allied methods of examination. The data obtained from such examination when competently interpreted lead to such a high degree of accuracy that diagnostic exploration is rarely necessary. To the urologist alone is the credit due. It is noteworthy that the indications for the examination of the urinary tract may consist only of the presence of abnormal constituents in the urine, notably pus cells and erythrocytes, in the absence of any subjective symptoms. Frequently such observations alone have attracted attention to the urinary tract, and stimulated investigations, with the result that serious organic surgical lesions of the urinary tract are found in the absence of subjective symp-

*Read before the Northwestern Ohio Medical Association, Findlay, Ohio, October 8, 1929.

toms. The symptoms of surgical lesions of the urinary tract are not always readily distinguishable from those of intra-abdominal disease, and often, by virtue of referred pain, may be entirely misleading. Renal tuberculosis is a rather common surgical lesion of the kidney, and presents many problems to the urologist and surgeon. Only through most careful examination and interpretation of data may one arrive at a diagnosis of renal tuberculosis, determine the degree of involvement, ascertain whether it is unilateral or bilateral, and intelligently exercise judgment in the matter of treatment.

Renal tuberculosis at The Mayo Clinic comprises about 27 per cent of the surgical lesions of the kidney in which nephrectomy is done. Because of bilateral involvement, because of the presence of advanced tuberculosis elsewhere, or of the absence of symptoms as the result of occlusion, the disease is not always best treated by surgical methods. It may be stated in general that the cure of unilateral renal tuberculosis is usually not accomplished except by nephrectomy.

It is uniformly agreed that the kidney is seldom alone the site of tuberculosis and that primary tuberculosis of the urinary tract seldom, if ever, occurs, and it is generally accepted that tuberculosis of the genito-urinary tract is hematogenous in origin. The high incidence of pulmonary tuberculosis in necropsy records would seem to indicate that the lungs act as the primary focus for secondary dissemination through the blood stream. With such dissemination, the kidneys may or may not become involved. However, when the kidneys are involved there has been associated tuberculosis elsewhere in approximately 80 per cent of the cases; the associated lesions predominate in the lungs, bones, joints and genito-urinary tract. In the absence of general contraindications or activity of a major tuberculous lesion elsewhere, associated lesions should not necessarily deprive the patient of the benefit to be derived from nephrectomy if the major tuberculous lesion exists in one kidney. Bilateral involvement of renal tuberculosis presents a question regarding which there is great difference of opinion.

The incidence of bilateral renal tuberculosis may appear to be high or low, depending on one's conception of the method of infection of the kidney and of the relative merit of diagnostic data. It is not my desire to consider and evaluate the data on which the diagnosis of renal tuberculosis is based; however, their general consideration in the question of bilateral involvement is necessary. In general, it may be stated that the clinical recognition of renal tuberculosis has reached a high state of accuracy even though the diagnosis, in many instances, is most difficult.

The presence of the bacillus of tuberculosis in the secretion from the kidney, or the positive reaction in the guinea-pig inoculation, or both, in the past have been readily accepted as indicating a tuberculous lesion in the kidney from which such bacilli-containing secretion was obtained. Wildbolz stated, however, that the demonstration of bacilli of tuberculosis in the renal secretion by no means signifies that the corresponding kidney is the seat of specific tuberculous changes in the tissues; that the presence of bacilli in the renal secretion may be due to so-called bacilluria, especially in patients with advanced pulmonary lesions, without tuberculous changes in the kidney. On the other hand, Medlar, from his experimental work and clinical observation, is of the opinion that bacilluria is always associated with the formation of at least a few minute tubercles in the kidney. To support the latter view, Thomas asserted that he had never removed a kidney which contained bacilli of tuberculosis that did not contain a tuberculous lesion. I would suggest that inasmuch as Thomas has confined surgical removal of tuberculous kidney to cases in which he suspected active caseous tuberculosis his observations have not included all kidneys from which he had known that bacilli of tuberculosis were eliminated.

Robertson, from an extensive necropsy experience, stated that he had never seen a tuberculous lesion of the kidney which was completely healed. Wildbolz, in support of his idea of methods of infection and interpretation of bacilluria, reported an incidence of bilateral renal tuberculosis in 12 per cent of his cases, whereas Thomas recorded an incidence of 55 per cent, and stated that since all renal infections, in which bacilli of tuberculosis are present, are hematogenous in origin, both kidneys are infected equally and that bilateral infection is the rule. I would suggest that in some cases in which bacilli of tuberculosis are eliminated in the urine, the organisms in their transit through the kidney have not been productive of lesions, but have acted in accordance with Brewer's concept as regards pyogenic organisms, that under certain conditions their transit through the kidney is not necessarily a lesion-producing process. Braasch emphasized the value of pyelography; he stated his belief that only by such data, in many cases, many a diagnosis of renal tuberculosis be established.

The wide variation and the opposing opinions on the incidence of bilateral renal tuberculosis caused me to review recently the cases of renal tuberculosis observed at The Mayo Clinic during the ten-year period from January, 1919, to January, 1929, with the idea of determining approximately the incidence of bilateral renal tuberculosis in those cases. During this period there were 838 cases, in 574 (68 per cent) of which nephrectomy was performed. Of the 264 nonoperative cases there were forty-three in which nephrectomy was advised but was not accepted by the patient; thus the operability or advisability of nephrectomy was increased to 73 per cent. In the remaining

221 non-operative cases a definite diagnosis of bilateral involvement was made in ninety-one as determined through clinical examination and necropsy data. In ten of these, some time previously, nephrectomy had been performed for renal tuberculosis, and the remaining kidney was subsequently found to be involved.

Definite data were obtained in twenty cases of the operative series in which a diagnosis of tuberculosis of the opposite kidney was made either previous to or subsequent to nephrectomy. On the clinical evidence at hand, a diagnosis of bilateral renal tuberculosis could be made in only 111 of the entire series (approximately 13 per cent). Wildbolz reported a mortality of 40 per cent within ten years. He stated that more than half of the deaths were due to tuberculosis of the remaining kidney, or to tuberculosis elsewhere. Braasch had previously reported 20 per cent deaths within five years after operation, of similar causes. Assuming that half of these may have been the result of tuberculosis of the remaining kidney, I am of the opinion that a primary or late incidence of 25 per cent bilateral involvement, through infection of the opposite kidney subsequent to nephrectomy, on a diagnosis of unilateral disease, represents a most liberal estimate of bilateral renal tuberculosis. Were it possible to obtain the necropsy data within the five-year or ten-year period postoperatively, I believe that the total incidence of bilateral involvement would actually be much less. It is obvious that there are many hiatuses in the evidence tending to support a high incidence of bilateral renal tuberculosis.

Nephrectomy in the presence of bilateral renal tuberculosis is seldom indicated or justifiable, although it may occasionally be justly considered if there is much pain, hematuria or acute sepsis in one kidney, and only slight involvement of the other.

The occluded kidney in which renal tuberculosis is present often presents difficult problems. In the present series of 221 non-surgical cases of renal tuberculosis there were forty-eight cases in which nephrectomy was not advised on account of complete occlusion and absence of symptoms. Usually if complete occlusion has occurred without secretion from the affected kidney, if cystitis is not present, and if the general condition of the patient is good, the indications for nephrectomy are not clear.

The presence of cystitis secondary to a tuberculous kidney is most significant as an indication for operation and affects appreciably the prognosis as to the extent of cure that may be expected. The amount of cystitis is sometimes out of all proportion to the degree of involvement of the kidney. Several months ago a patient was observed in the clinic who had had severe cystitis of thirteen years' duration and whose condition was diagnosed renal tuberculosis. At operation a perfectly normal ureter and kidney were found, and only after section of the kidney after its removal was a tuberculous lesion less than 0.5 cm. in diameter disclosed.

In general, approximately 20 per cent of the patients had had vesical symptoms, as the result of cystitis, persisting more than five years after operation, with complete cure and relief of all symptoms in 60 per cent. However, Braasch recently reviewed sixty-five cases in which nephrectomy had been done between five and fifteen years previously and in which there was advanced ulcerative cystitis, with marked reduction in the capacity of the bladder. In these cases the mortality rate was 37 per cent within five years, and the condition of the bladder in 30 per cent of the patients living was not improved.

It is apparent that early nephrectomy before advanced involvement of the bladder occurs insures materially better results than may be expected in those cases of advanced involvement of the genito-urinary tract. As to whether or not nephrectomy should be considered in the presence of tuberculous lesions elsewhere depends largely on the degree of activity of the various tuberculous lesions. In the absence of general indications, if the tuberculous kidney is the most significant tuberculous lesion, its removal is justifiable. The low primary mortality rate of 2 per cent following nephrectomy for unilateral renal tuberculosis justifies the operation even if there is moderate pulmonary involvement. Associated Addison's disease as the result of tuberculous involvement of the suprarenal glands merits careful consideration. Two operative deaths were due to such associated disease. Low blood pressure and discoloration of the skin should attract attention, and if considered due to Addison's disease, should usually serve as contraindications to operation.

In advising nephrectomy for unilateral renal tuberculosis, one should do so with the idea of accomplishing more than simply relieving the urinary symptoms, with the hope that in removing a tuberculous kidney, resistance to tuberculous infection elsewhere may improve, with the healing of other tuberculous foci that may be present. To accomplish such a purpose, it is necessary that nephrectomy be considered only as a part of the general measures in the treatment of tuberculosis, and when associated active tuberculous lesions are present, heliotherapy and other general measures should be employed to obtain the best results, not only in remote tuberculous lesions, but in those of the urinary tract as well.

So far as the operative procedure is concerned, a number of factors is important in the performance of nephrectomy. Inasmuch as the ureter usually is extensively involved, the question of ureterectomy often arises. Experience has shown that the ureteritis, whether it is tuberculous or non-tuberculous, usually subsides after nephrec-

tomy. Although occasionally a persisting postoperative sinus is encountered, it seldom is due to the ureter unless there has been an occluded process in the kidney. It has seldom been necessary at The Mayo Clinic to consider secondary ureterectomy for the cure of a sinus persisting after nephrectomy for tuberculous disease. A persisting sinus, in most instances, has been due to perinephritic tuberculous infection, incomplete removal of all tuberculous tissue, or the institution of drainage.

Tuberculous pyonephrosis, either through direct extension or the formation of a perinephritic abscess, sometimes leads to extensive perinephritic infection, and only through removal of all perirenal fat and involved structures may one expect primary healing of the wound. It is true that this is not always possible. In the eradication of tuberculous pyonephrosis, the amount of inflammatory reaction about the vascular pedicle may justify leaving hemostatic forceps on the pedicle for seventy-two to ninety-six hours, accepting, in favor of safety of hemostasis, the disadvantages of providing drainage and delayed healing.

The ureter in cases of closed renal tuberculosis, particularly if the occlusion by stricture has occurred in the lower part of the ureter, may serve as a cause of the nephrectomy wound breaking down through the dissemination of tuberculous material into the wound after absorption of the ureteral ligature. In the absence of occlusion, drainage of the tuberculous contents of the ureter is directly into the bladder. Although ureterectomy subsequent to nephrectomy for renal tuberculosis has seldom been necessary, the primary removal of as much of the ureter as is possible, simultaneously and intact with the kidney, is to be highly recommended. The division of the vascular pedicle and elevation of the kidney out of the wound favors using the kidney for traction on the ureter, and facilitates the removal of more of the ureter than when the ureter is sought as the first step in the accomplishment of nephrectomy.

Various methods of treating the ureter after nephrectomy for renal tuberculosis have been employed. Any method which involves bringing the ureter to the surface of the wound is objectionable, for it favors a subsequent ureteral fistula. Sterilization of the cut end of the ureter with phenol or the actual cautery possesses distinct merit, and experience has proved that it is better practice to divide the ureter with the cautery either before or after thorough ligation. Certainly low division of the ureter by cautery and ligation with chromic catgut has proved a most satisfactory method of dealing with the ureter; in only a few instances has a sinus persisted as a result of infection from the ureter.

In the presence of tuberculous pyonephrosis, removal of all adherent perirenal fat with the kidney affords a greater prospect of removing all tuberculous tissue than if subcapsular nephrectomy is performed. In other words, thorough removal of perirenal fat, accurate hemostasis, partial ureterectomy as low as possible through the primary incision, with sterilization of the stump by cautery after secure ligation, afford closure of nephrectomy wounds without drainage, and result in primary healing in a high percentage of cases.

HEALTH PROBLEM OF THE INDIANS

Another example of the important part played by economic and social conditions in the health and welfare of the nation is found in a recent report made by Dr. M. C. Guthrie, surgeon of the United States Public Health Service and chief medical director of the bureau of Indian affairs following an investigation of the causes for the high death rate among the American Indians.

According to Dr. Guthrie, the American Indians have a death rate twice as great as that of the general population of the United States registration area, tuberculosis accounting for about one-fourth of all Indian deaths.

This, Dr. Guthrie believes, is due in part to lack of racial immunity to this disease, unfavorable social factors, poor economic status, with unhygienic living conditions, and an inadequate or poorly balanced diet.

A survey made by the California State Department of Health among 827 Indian families, including nearly 4000 individuals and 35 tribes, throws some light on the "poor economic status," referred to by Dr. Guthrie.

It was found that a quarter of the families investigated had an annual income ranging from $200 to $400; 128 families had an annual income ranging from $400 to $600 and 100 families an income from $600 to $800.

In commenting on the survey, the California health department said:

"The most important fact brought out by the survey is that Indians in California do not earn enough money to live properly. They suffer from lack of food, are not properly housed and do not follow the common rules of personal hygiene and sanitation. As a result they are unable to withstand attacks of disease. * * * It is impossible to improve the physical condition of the Indian greatly until his economic condition has been improved. Health conditions would improve automatically to a large degree if economic conditions were improved."

Restoration of health to classes of individuals or communities is not always as simple a process as some are inclined to believe, Dr. Guthrie's survey indicates. Basic causes of unhealthy and unhygienic conditions must be eliminated before extended medical and public health service can be of much benefit.

Annual Report of the Committee on Medical Economics

(Combined with the Report of the Special Committee on Socialized Medicine)

J. CRAIG BOWMAN, Chairman, (1930) ..... Upper Sandusky
GEO. EDW. FOLLANSBEE, (1931) ..... Cleveland
E. O. SMITH, (1932) ..... Cincinnati
L. L. BIGELOW, (Special Member) ..... Columbus
E. M. HUSTON, (Special Member) ..... Dayton
DON K. MARTIN, Secretary ..... Columbus

In the sense that medical economics contemplates the study and provision for adequate medical service, its distribution and utilization by the public, this committee has been called upon to consider numerous questions in relation to rapidly changing sociological conditions affecting the physician as an individual practitioner, the patient whom he serves, the profession as a whole, and the public at large.

While it may be assumed that medical economics in its primary sense has to do with the essential material welfare and security of the medical profession, this is incidental to the greater objective of providing scientific medicine for the public. The latter must necessarily depend upon the former and any principles or procedure of medical economics must take into account practical, permanent, public service and public benefit.

Based on a resolution adopted by the House of Delegates at the last Annual Meeting calling for further study and activity on socialized medicine, two special members were added to this committee by the Council. At the time the resolution was adopted in the House of Delegates, the Reference Committee called attention to the fact that numerous angles of medical economics, sociology and government as they affect scientific medicine, medical practice and public health "had had the constant, earnest, sincere and thoughtful attention of the Council, the Policy Committee, the Medical Economics Committee, our General Counsel and the officers for more than ten years". In view, however, of the fact that the resolution "betokens a desire for further activity", its adoption was recommended.

Pursuant to that action, this committee assembled and studied voluminous current literature on social trends in relation to medicine and many definite situations illustrative of this broad field. At the outset, this committee was confronted by the difficulty of defining and interpreting "state medicine" and "socialized medicine".

The almost unlimited problem of state medicine and socialized medicine is shown by the estimate that there are approximately 1,500,000 persons employed on a whole-time basis in the United States who are ministering in one way or another to the sick or are occupied in various types of health endeavors. This vast number, of course, includes the regularly licensed physicians and surgeons who, according to the 1929 American Medical Association directory, totalled 151,285. Among estimates are 24,000 attendants of physicians and surgeons; 2,800 hospital superintendents; 330,000 hospital attendants; 149,000 trained nurses and 152,000 untrained nurses; 80,000 retail drug dealers; and 64,500 dentists. It has also been estimated that there are 11,500 health department personnel, and 1,000 personnel of "private health organizations" not included above.

Among official agencies in the federal government which are recognized as coming within the accepted field of "state medicine" are the several thousand medical officers of the Army, Navy, United States Public Health Service, and National Guard; the 1200 physicians attached to the U. S. Veterans' Bureau; 350 medical officers of the U. S. Treasury Department, in addition to those in the Indian service, pension claims department, U. S. hospitals, federal prisons and other institutions, those whose duties are included in narcotic control, in the bureau of standards and in the others among the twenty or more scattered health agencies within the federal government.

HEALTH AND MEDICAL FUNCTIONS IN OHIO

As for "state medicine" in the several states, including Ohio, there are the accepted and recognized departments and functions of the State Department of Health, including sanitary engineering, water and sewage control, communicable diseases, hygiene tand State Department of Health Laboratory; the function of examination and licensing of physicians and other practitioners, medical education in the state medical school, university hospital and student health service, workmen's compensation, department of welfare with its 23 state institutions, including 11 institutions for the care of the insane, feeble-minded and epileptic wards of the state, as well as the other penal and correctional institutions, bureau of juvenile research, etc., division of health and physical education in the state department of public instruction.

Factory inspection, hotel inspection, regulation of hours of work for women and children, regulation and inspection in the sale of drugs, and the multitude and variety of statutes and regulations for the purpose of health protection may also be included under the general heading of "state medicine" in addition to provision for the care and education of the blind, deaf and crippled.

When administered within the terms of the general and fundamental policies already defined by medical organization, these numerous functions are not only accepted, but approved.

In like manner, numerous functions of "state

medicine" of a local nature are in effect in Ohio, as well as elsewhere, including local health administration, control and inspection of foods, water supplies, sewage disposal, public health nursing, infancy and maternity activities, medical, dental and nursing services in public schools, recreation and physical education, poor relief, municipal, county or township or district hospitals, including tuberculosis, contagion and other hospitals or clinics; programs of immunization, preventive medicine and public health education.

The vast extent to which governmental functions directly dealing with public health have developed and increased in recent years is illustrated by the expenditures of the State Department of Health, from appropriations made by the State Legislature, which were six times as much in the last decade as in the preceding one. These figures are from 1910 to 1919, inclusive, $829,-444.86; and from 1920 to 1929, inclusive, $5,023,-824.52. Twenty-three years ago in 1907, the records show that the annual budget of the State Department of Health was approximately $27,-000; whereas the appropriations for the department from state funds for 1929 were $638,073.00, not including federal subsidies, but including the Bureau of Vital Statistics, State Department of Health Laboratory, and the quarter million dollar annual subsidies distributed by the state department to local health units.

For the year 1928, the latest on which detailed statistics are available from the Bureau of Inspection and Supervision in the Auditor of State's Department, the 93 cities in Ohio (population 5,000 or more) spent for all governmental purposes $128,436,001.88, of which $30,710,331.85 was spent in a general broad field of health, including water and sewage plants, sanitation and promotion of cleanliness, charities, hospitals, corrections, recreation and health administration.

The total expenditures by the counties for all governmental purposes in Ohio, exclusive of the 93 cities in 1928, was approximately $100,000,000. If the relative proportion of 23 per cent, which obtains in the cities, prevailed for counties for the above purposes, a total of $50,000,000 was spent by the cities and counties together in Ohio in the general field of welfare and health.

In the same year, the audit of expenditures by the State of Ohio shows approximately $11,-825,000 spent directly by the State for welfare and health work, including the maintenance and improvements in the state hospitals, penal and correctional institutions of the State Department of Welfare, and in support of various other state activities and institutions directly pertaining to welfare, health and medical practice. Moreover, there was spent as a state function through workmen's compensation, $14,235,964, which is, at least in a measure, a socialized state welfare-health function. A total of expenditures by the cities and counties, the state, and workmen's compensation in this broad field of health-welfare, totals $76,060,964 in one year.

"SOCIALIZED" OR "STATE" MEDICINE

In the field of unofficial "socialized medicine" there are found many agencies, activities and problems even more complicated and difficult of definition than in the broad field of governmental medicine and health service. Many of these are altruistic and humanitarian and serve a definite social and economic need, especially when applied and administered in accordance with the fundamental policies already established and repeatedly pronounced by medical organization. On the other hand, many of them are "border line" functions, correct and practical in some features and unsound socially and economically, in others, while still other activities are unsound in general both from the standpoint of sociology and economics. And these, as well as the other types, when analyzed as separate problems, can be determined in their scope and intent either as good or bad, proper or improper, when fundamental policies are applied to them as a measurement and test.

Among the increasing number of activities which may be listed as "socialized medicine" and as coming within one or more of the three general groups just enumerated, are so-called health education by innumerable voluntary groups and agencies either within their own membership or directed to the public at large, frequently including clinics, either temporary or permanent, and often made possible by assistance from governmental health departments and from physicians in private practice.

Hospitals, community fund collections and disbursements, and public charities cover many "socialized medicine" activities, as do various types of clinics, free, pay and part-pay, including those on prenatal, pediatric, pre-school, venereal, tonsil, eye, hearing, dental, tuberculosis, heart, cancer and orthopedic.

There is probably no way of estimating the annual expenditures in Ohio by the numerous local and several state-wide voluntary agencies in the health-welfare field. It may be assumed, however, from the figures available from the total of community funds in only twenty-six Ohio cities in 1929 totaling $11,572,475, that at least a substantial percentage of this amount was utilized in health-welfare activities, in addition, of course, to the many other sources of contributions and funds to agencies not maintained by community funds.

In addition to the various types of "socialized medicine" enumerated in preceding paragraphs, may be listed free service in private practice, hospitals and dispensaries, as well as failure of physicians to charge for preventive work, immunization, etc. Public health federations, health conservation leagues, parent-teachers organizations, state and local, have distinctive socialized functions.

Other group socialized functions include industrial medicine, insurance examinations and practice, insurance including periodic health examinations, health and accident insurance, railway and public utility medical service, lodge practice, trade union health benefits, life extension institutes, health by mail laboratories, contract practice, group disability insurance, health magazines and even syndicated health literature in newspapers and other lay publications.

These data are significant. They have been gathered and here expressed, to inform the profession of the wide extent over which medicine has already been socialized and to provoke serious thinking on the possible results of further extensions.

SPECIALIZED MOVEMENTS

Detailed enumeration and illustrations are unnecessary in referring to the rapid extension of specialized organizations and movements of a social, welfare-health nature, many of which foster specialized clinics ostensibly for educational purposes. While the medical profession and medical organization is and always has been earnestly interested in the promotion of public health along practical and constructive lines, it is quite clear that some of the specialized, modern activities in the field of public health have tended to confuse rather than to inform the public. Some of these movements have created lack of confidence in the local practicing physicians and have attached prominence to a few specialists to the detriment of other practitioners equally well qualified. Such so-called educational movements in the field of health have been known to increase self-diagnosis and self-prescribing, and to destroy cooperation between various agencies, as well as to encourage persons amply able to pay for medical attention to expect free service.

Some members of our profession have criticized medical organization and the majority of physicians for their "unsympathetic attitude" toward *public health*, as exemplified in the various health-welfare movements and have insisted that these should have medical leadership and medical support. In theory, at least, many of those movements have identified with them outstanding members of the profession, but with little or no guidance, direction or control by them. The majority of the medical profession, and medical organization itself have been criticized by a few of our "socially minded" members for being inclined to oppose and obstruct, rather than to guide and direct. By this criticism they imply that most of these numerous organizations, agencies and movements are socially and economically sound. In fact, this committee, believing itself to be in unusually close touch with social-welfare activities, feels that medical organization probably, many years ago, should have adopted a more critical and analytic attitude toward these movements rather than politely acquiescing, endorsing or "cooperating" in them.

PRONOUNCEMENT ON POLICY

In reference to specialized health movements and various types of clinics, the Speaker of the House of Delegates of the A. M. A., in 1926, touched on this problem as follows: "There are evidenced in many communities tendencies toward rapidly growing development of this type of medical practice. They are being aided, abetted and sponsored in many instances by medical men, members of constituent units of our Association, who, hiding under the guise of *public health education*, seek to justify their actions and ignore in doing so the Association's enunciated policies". The medical profession has cooperated in all practical, constructive health movements, but mere labels of "public health, public welfare and public education" do not necessarily mean that agencies, activities, organizations and movements, so labeled are correct and constructive. It is therefore incumbent on medical organization, especially in these days of propaganda and rapid social changes to analyze those activities that directly impinge upon medical practice from the standpoint of their *implications, possibilities and end-results.*

This committee therefore recommends reiteration and approval of those pronouncements made by the House of Delegates in previous years and summarizes its attitude toward the definition and limitation of "state medicine" and "socialized medicine" as follows:—*that any plan or system which affects the medical profession detrimentally will inevitably be detrimental to the public as well. Any plan, system, or activity which tends to destroy or lessen scientific research, individual initiative and ambition, adequate remuneration for effort and ability, scientific independence, reasonable competition, personal responsibility; which would lower the standards of medical education or inculcate unsound ideas in the public mind toward scientific medicine, are wrong, unwise, impractical and will inevitably be doubly costly to the public.*

WORKMEN'S COMPENSATION

As in previous years, this committee has given close attention to the administration of the Workmen's Compensation Law and has continued its close and cooperative relationship with the State Industrial Commission and various divisions and bureaus of the Commission. It was with the approval and endorsement of this committee that the Commission in recent months has inaugurated a system to eliminate many of the delays in handling the Form C-3 (medical only) cases, those in which compensation is allowed only for medical or surgical services, and which are of such duration that compensation is not provided for the injured employe.

This committee appreciates the many sugges-

tions that have come to it from the members of the State Association, through our state headquarters, having to do with administrative details. Under the direction of this committee, our state headquarters and Executive Secretary have been of assistance to many members in minimizing delay in the payment of claims, in securing information, and in representing the united medical viewpoint to the Commission. It is the opinion of this committee that our interest in these problems must continue and that the medical profession should oppose changes in the Workmen's Compensation Law unless such changes are upon agreement by the various interested groups who are concerned with the principles of workmen's compensation and who are qualified to render constructive advice.

OCCUPATIONAL DISEASES

Difficult and controversial questions in relation to occupational diseases have been studied during recent months in conferences with representatives of different groups. This committee has been criticized by a few individual physicians for its previous attitude toward proposed amendments to the occupational disease section of the Workmen's Compensation Law. The controversy has arisen from those who advocate a "wide open" occupational disease provision. As stated in the report of this committee last year, enlargement in the list of occupational diseases compensable under the law should be done with caution and only after serious consideration. Only diseases definitely defined from a medical and medico-legal standpoint, and only those unquestionably determined to have their origin in the hazards of industry should be included in the Code.

Those advocating the plan for blanket coverage, appear to be certain labor men; hygienists, dealing rather with the theory than the practice of compensation administration; and possibly a few men connected with the administration of compensation laws. The principal arguments for blanket coverage, as advanced, appear to be that, under the schedule method, certain deserving cases of truly occupational disease may be unable to obtain compensation, and also that the entire cost of occupational disease is so small compared to the amounts involved in compensation for accidents that, financially, the additional payments involved for all occupational disease claims would be negligible.

The objections to a blanket coverage, especially under the Ohio law, are briefly as follows: Any doctor's certification of diagnosis is sufficient to establish a claim for occupational diseases. In case of disagreement by the employer, the employer has no right of appeal and his only recourse, other than to allow the claim, is to refuse forthwith to admit it and put himself immediately in the position of denying the claim, and the burden of proof, that it is not occupational then rests with the employer. This means that the majority of claims regardless of their merits would pass through the hands of the Commission uncontested, and become a steadily increasing source of expense to the State or to the employer.

As familiarity with occupational disease procedure increases, and its present weaknesses are better understood, there will undoubtedly be a substantial increase in occupational disease claims. Already, there is noticeable a decided tendency to claim compensation for non-occupational diseases. All these claims have evidently been certified by physicians. With a blanket coverage, instead of the schedule, it appears that such claims would increase very rapidly.

The less definitely outlined the coverage for occupational diseases, the greater the necessity for employers to draw the lines closer in regard to physical requirements for employment. Many men now freely given employment, might find it very difficult to get jobs because of conditions present, which if slightly aggravated, might lead to claims for compensation involving not only the aggravation but the underlying condition. If the employer did not wish to contest many of these cases, it would be necessary for him to provide medical attention for more and more doubtful cases. With the increase of doubtful cases so treated, would come a decided trend toward establishment of some form of state medicine or at least paternalistic practice, either of which would be detrimental.

A RECOMMENDATION

We therefore believe that the proper method for compensation of occupational diseases is a carefully prepared schedule.

Such a schedule should be carefully studied from time to time as to its adequacy in covering the occupational diseases occurring in the state. Careful study should also be made of the claims rejected for lack of scheduling with a view to intelligent revision of the schedule.

During the calendar year of 1929, there were a total of 1,381 occupational disease claims under the Workmen's Compensation Law, an increase of 191 over the preceding year.

In analyzing the occupational disease situation under the Workmen's Compensation Law, *The Monitor*, the official bulletin of the Industrial Commission of Ohio, in its issue of February, 1930, showed that in 1929 there were 37 occupational disease death claims filed, compared to 28 in 1928. Ten of these death claims during 1929 were for non-compensable diseases. Nineteen of the death claims attributed death to lead poisoning; 3 to dermatitis; 2 to benzol or derivatives; 1 to anilin poisoning and 2 to volatile petroleum products. The 10 death claims filed for non-compensable conditions were classified as follows: tuberculosis, 3; asthma, 1; bronchitis, 3; some

form of poisoning, 2; infections and contagions, 1.

As demonstrating the probable difficulty under any wide-open provision for compensable occupational diseases, *The Monitor* concluded that same article as follows:

"As has been indicated there seems to be an increasing tendency to file claims for death awards in many instances in which there is little if any indication that death was the result of an occupational disease. For example, an examination of the death claims attributed to dermatitis shows that of the 3 claims filed, in one instance death was due to suicide, in another the decedent died as the result of diabetes three years after he received compensation for a short period of disability attributed to dermatitis from oil, while the third claim recently filed is out for investigation. In the same classification is the claim for permanent total disability in which there was no evidence of a skin disease, but a total loss of vision which was attributed to tobacco poisoning. This last claim was found non-compensable. These claims are mentioned to show that in many instances the claims filed do not really indicate the existence of an occupational disease or a death as the result of some occupational hazard."

In substance, then, the attitude of this committee on the question of future legislation on compensable occupational diseases is that the schedule method should be retained, but that all diseases, processes and agencies found from experience as possible sources of distinct and definite occupational disability and diseases, should be added to the list as promptly as possible. This is really a problem of accurate, practical, legal provision to secure the greatest amount of justice and at the same time minimize the factor of personal opinion or variable administrative policy and to avoid the creation of unlimited questions and additional injustices through a blanket, unworkable and impractical provision.

CONTRACT PRACTICE

A number of definite problems involving contract practice, economics and professional relations have been presented to this committee during the past year. Some of these problems are so intricate and involved that they are still pending. This committee believes that it may be of value to emphasize the conviction that medical service, to be efficient, must be on a personal and professional basis with as nearly as possible, when practical, "free choice" by the individual of his personal medical advisor and attendant.

The Principles of Ethics of the A. M. A., Article VI, Section 2, read as follows:

"Sec. 2.—It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interfere with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession."

This committee interprets the foregoing as in accordance with our italicized summary on "socialized medicine" in the preceding part of this report.

It may properly be observed that paternalism, whether exercised through government and the state, or by private individuals and corporations over groups and classes, is fallacious. No private business, for example, would think of furnishing to its employes and the latter's families, uniform food, houses, clothing, automobiles, radios and personal amusements. It is presumed that competition and personal choice are important elements in personal endeavors. If business and industry see to it that employes are properly and adequately compensated for their labor, such employes can and should, within the limitations of their wage or income, provide their own personal surroundings, habitation, food and care—including medical service for their families and dependents; *especially* when illnesses and injuries so treated are in no way connected with the hazards of industry encountered by the wage earner.

COST OF MEDICAL CARE

Never before in an equal period has there been so much discussion and have so many articles been published in the lay press and magazines, as well as in medical publications on "the cost of medical care" as during the past year. This is distinctly a medical economic problem and this committee has endeavored to assemble most of the material published on this question. It has been especially interested in the problem in view of the fact that a member of this committee, Dr. Follansbee, who is also chairman of the Judicial Council of the A. M. A., and a former president of the Ohio State Medical Association, is likewise a member of the Executive Committee of the National Committee on the Cost of Medical Care.

This committee regrets that much of the implication in lay articles on this subject has been a misplaced emphasis on the *high cost* of medical care. Much of this implication has encouraged and invited still more complaints centered directly on the medical profession, most of which, of course, has been outside and beyond the membership of the National Committee on the Cost of Medical Care or its full-time staff of investigators. Our committee has assembled data which seem to show that the increase in medical fees during recent years has not been as great in proportion as the increase in the cost of other services and necessities of life, and that much of the increase in the health service to the individual, as well as to society, is caused by "accessories" and other services, public, or private, for which the practicing medical profession cannot assume the responsibility.

The development of an economic system with unlimited credits, with credit buying and increased indebtedness has brought about a situation where a great proportion of the public is living beyond its means without any budget provision for illness or emergencies. Some social-welfare exponents have propounded the plan of

free medical, surgical and hospital care at public expense to all those whose standards of living would be lowered or lessened if they were to pay themselves for their medical care.

As frequently pointed out by writers, many people are purchasing beyond their means, automobiles, radios and other luxuries on credit, and protest and complain when required to pay relatively small fees for medical and surgical service.

It is our opinion that if any facts of value are to be assembled by the National Committee on the Cost of Medical Care the inquiry and survey must include data on relative costs and increases of all necessities of life, of luxuries and accessories, as well as the variation in wages and salaries and the innumerable factors aside from medical and surgical services involved in the cost of illness and in the maintenance of private and public health. Thus far, no authoritative studies have come to the attention of this committee, which indicate that any appreciable proportion of the population is without medical service when it is needed, or that a substitute impersonalized, mechanistic plan of medical distribution would in any way correct the present inequalities. We feel, on the other hand, that such substitute measures would be detrimental not only to the public, but to scientific medicine.

LABORATORY SERVICE

Among the interesting special types of "state medicine" which have been under consideration by this committee is the gradually increasing amount of clinical laboratory service rendered by public health laboratories and the concomitant question of advertising and cut-rate practices by some clinical laboratories in private practice.

A group of physicians specializing in laboratory practice and diagnosis has urged that public laboratories should be limited to epidemiological work and that such work should be submitted to the laboratories only through public health officials, and that additional public laboratory service should be done only for charitable organizations and institutions, or for indigents.

It will be remembered that in 1924, this committee had a similar question under consideration, at which time through conferences with officials of the State Department of Health, there was inaugurated a plan whereby report and record cards submitted with specimens for Wassermann test to the State Department of Health Laboratories should bear the notation "This Service is limited to indigent persons."

At that time, this committee made a survey, through questionnaires to several hundred representative physicians in the state. Over eighty per cent of those who answered the questionnaire stated that they used more or less frequently, and more or less regularly, the services of the state or municipal laboratories, or both, thus indicating the important place that such laboratory work has taken in the practice of medicine.

At that time, this committee recommended that the state and municipal laboratories should be prepared to perform all types of laboratory work having a bearing on public health, i.e., in the control and prevention of disease, but that work of a purely diagnostic nature such as examination of pathological tissues, is not a function of the laboratory supported by public funds, either state or municipal.

In regard to the performance of the Wassermann reaction by public laboratories, this committee at that time felt that except in the early and contagious stages of syphilis, the Wassermann reaction cannot be considered as essentially a public health measure, the test in most cases being of diagnostic importance and value to the individual patient and his attending physician only, and not to the community at large. The policy at that time was pronounced that the performance of the Wassermann reaction for all cases, no matter what the stage of the disease and without reference to the financial condition of the patient is not necessary to the public health and that here is a distinct opportunity for the regulation and restriction of this and similar services by public laboratories.

This committee believes that these policies and these problems should be the subject of further conferences at this time between this committee, specialists in private laboratory practice, representative general practitioners and specialists and public health officials, in order that a clearer understanding and more general definition may be arrived at.

In considering this question, a rather thorough statistical summary was made of the type of service rendered and the extent of increase in the work done by the laboratory of the State Department of Health. For example, it was found that since the year 1919, when 30,113 Wassermann tests were made by the State Department of Health Laboratories, that the number in 1929 had increased to 80,502, Kahn tests had increased from 16,588 in 1926, when they were first available, and to 77,146, in 1929.

* * * *

CONCLUSIONS

In conclusion, this committee again emphasizes the importance and seriousness of the many social and economic factors directly affecting medical practice and the rapid changes that are taking place in our relationship to the public. As previously indicated, the seriousness of these complex and involved problems is aggravated by the divergent viewpoints among our own membership. This fact demonstrates the necessity for clear thinking and fearless action.

Provision should be made in each component society and academy for thorough consideration of social economic problems, in order that the

majority viewpoint may be defined and expressed and in order that there may be as great a degree as possible of harmony and effectiveness throughout our organization. Ignoring of problems or polite acquiescence to the insistence of some of our more aggressive though perhaps visionary members will only make conditions worse rather than better. Let's define the issues as they arise. The great majority will undoubtedly find the right solution, which must then govern our policies and activities as a forceful organization in conformity to our constitutional purpose "to promote the science and art of medicine, and the protection of public health".

Annual Report of the Committee on Public Policy

J. H. J. UPHAM, Chairman, (1931) ..... Columbus
H. S. DAVIDSON, (1932) ..... Akron
JOHN B. ALCORN, (1930) ..... Columbus
ALBERT H. FREIBERG, (ex-officio) ..... Cincinnati
C. W. WAGGONER, (ex-officio) ..... Toledo
DON K. MARTIN, Secretary ..... Columbus

Social, economic and political factors and developments affecting public health and medical practice are constantly becoming more numerous, more complex and more confusing, calling for continuous alertness, thoughtful study, sound judgment and vigorous activity on the part of the medical profession and others who are sinserely and honestly interested in the welfare of the public, and also jealous of the lofty standards and unselfish motives of the medical profession.

With this in mind, the Committee on Public Policy of the State Association has during the past 12 months labored to secure the best united thought of the profession; to gauge its attitude and action by the greatest public benefit, and to represent the sound, concerted, conservative medical viewpoint on matters pertaining to public health and medical practice.

Numerous, important questions and problems which called for expressions of policy, and often prompt action, concerning governmental functions and administration, legislative enactments, public health regulation and activities, socialized movements and encroachment upon private competitive medical practice have been closely studied by this committee.

LEGISLATIVE PROBLEMS

During the past year, your committee has been constantly in touch with many of the newer developments in state and federal governmental administration and legislation, especially with those matters which affect public health and medical practice.

The vital necessity for organized medicine to form contacts with organizations, groups and individuals in other fields is shown in a study published sometime ago in the *National Municipal Review*. This survey indicated that approximately 75 per cent of all bills introduced in the Eighty-Eighth General Assembly of Ohio, which was in session early in 1929, had their origin outside the legislative assembly and that the success of privately framed legislation was much greater than that drafted by members of the legislature themselves. The importance, therefore, of impressing the proper medical and public health viewpoint on the groups and individuals responsible for such a large portion of legislation is quite obvious.

It has been estimated by Dr. William C. Woodward, head of the Bureau of Legal Medicine and Legislation of the American Medical Association, that during 1929 the legislatures of 43 states considered approximately 2500 bills of direct medical interest.

Approximately 170 bills which had a direct bearing on public health or medical practice were introduced in the last Ohio General Assembly. These were considered by this committee, as pointed out in the 1929 report of the committee. In addition, 40 other bills of general interest and importance were studied.

Political economists have estimated that no less than 10 per cent of all measures introduced at state legislative assemblies are intimately related to public health and medical practice. There is every reason to believe that the coming 1931 session of the Ohio General Assembly will live up to this expectation. We must remain constantly alert. And must anticipate as far as possible what measures will be introduced and lay plans for expressing the opinion of the profession regarding them.

Your committee has already discussed and reviewed preliminary drafts of no less than 35 proposals which undoubtedly will be introduced at the next session of the Legislature. A considerable number of these measures are of direct interest to the medical profession, some of them having a distinct and destructive bearing on medical practice.

The movements and activities of those who have been striving to lower professional standards in Ohio and break down the bars so that incompetent and unscrupulous practitioners and cultists can prey upon the public must be anticipated. Plans to warn the public and their legislative representatives of the danger and menace in proposals of such individuals and groups must be formulated. Measures hostile to scientific medicine, community public health work and enforcement of the sanitary and hygienic regulations and laws must be opposed.

Organized medicine, through the members of its component county medical societies, should be prepared to give accurate and sound advice to

legislators concerning the fallacies and dangers of anti-health and anti-medical proposals, as well as those which smack of paternalism, seek to set up socialistic governmental agencies, authorize further invasion of government into the field of personal responsibility and personal initiative, or delegate to centralized state authorities powers and duties which rightfully belong to local governments.

Organized medicine, through the members of all county medical societies, should take an active interest in the approaching primary and general elections when members of the next General Assembly and other public officials are to be chosen. The qualifications of each candidate should be studied. Those hostile to scientific medicine and sound public health administration should be opposed; those willing to heed the advice of the medical profession on these matters and who desire to serve the best interests of the public should be supported.

GROWTH OF CENTRALIZATION

No little concern has been shown by the Policy Committee over the numerous attempts to centralize power and authority at Washington, extend the jurisdiction of the federal government and take away from the states and individuals many of the rights and much of the responsibility given to them by the founders of the nation.

The growth of bureaucracy and paternalism has been viewed with alarm by many political economists. Warnings have been sounded, but the race to endow federal bureaus and agencies with more power has continued. This has been especially noticeable in the field of public health, public welfare and medical practice, and your committee believes that the time has arrived when a sharp halt must be called if this nation is to avoid the pitfalls into which several European countries have fallen. In other words, it is high time that there be a return to the ideals of the pioneers, who stood for, in the language of Thomas Jefferson, "a wise and frugal government which shall restrain men from injuring one another and leave them otherwise free."

The present-day craze for new legislation on a wide variety of questions continues to run rampant. Recognition of this situation was expressed recently by President Hoover in pleading for limitation of governmental outlays to treasury resources, when he said:

"It should be understood that the unprecedented drive now in progress for new legislation and for expansion of established services which increase expenditures beyond the budget, only in a small percentage originates with members of Congress or heads of government departments. It originates from different sections of the country itself and from various groups and organizations, each vigorously supporting their own projects."

Activities at Washington pertaining to health and medical practice have been followed closely. The protests of this committee and the State Association against enactment of legislation reviving subsidized infant and maternity hygiene as administered under the former Sheppard-Towner Act were filed with members of the Ohio Congressional delegation. The fallacies and dangers of this type of legislation are too well known to members of the profession to need repetition.

This committee also played a prominent part in the successful attack on the proposed increase in the tariff on surgical instruments, which, if enacted, would in time, have added several millions of dollars to the expenses of Ohio surgeons and hospitals.

Careful study has been devoted to proposed amendments to the World War Veterans' Act. We believe that it is the duty and responsibility of the federal government to provide the best medical, surgical and hospital service available for those veterans disabled through war service and as a result of service-connected injuries. However, the committee also believes that such service should not be rendered those veterans disabled as a result of civil pursuits in no wise connected with military service and who are amply able to pay for such service from private practitioners and from private hospitals. Of course, indigent veterans, like indigent civilians, are entitled to medical and hospital services at public expense.

The Policy Committee also protested against enactment of bills providing for drastic revision of the laws and regulations pertaining to narcotic drugs. The medical profession always has supported and cooperated with federal authorities in enforcement of laws stamping out the improper and illegal traffic in narcotics. However, the two bills mentioned were deemed ill-advised, costly, an attempt to extend control of the federal government and an unnecessary duplication of effort and detail on physicians, and at the same time did not provide for a more efficient method of issuing, suspending or revoking narcotic licenses.

Many other questions involving federal legislation or administration have been considered and the committee has either acted directly or assisted the Bureau of Legal Medicine and Legislation of the A.M.A. in supporting or opposing them, basing its action on definite principles and policies previously laid down at various times by the House of Delegates of the State Association.

COOPERATION WITH OTHERS

Re-endorsing policies laid down in previous years that the medical profession must continue to be the leader in all things pertaining to public health and medical practice because it is more competent and in a better position to judge of what is good and what is bad for the health of the public, the Policy Committee has endeavored

to extend and strengthen contacts and cooperation with other groups and agencies interested in common problems.

An example of the activity of the committee in establishing harmonious relations with allied groups is reflected in the series of conferences held during the year with a special committee of the Ohio State Pharmaceutical Association for the purpose of formulating suggestions and recommendations for closer cooperation between the two professions on matters of common interest.

As a result of these joint conferences, a report of the Policy Committee recommending policies and procedure in the relationship which should exist between the profession of medicine and the profession of pharmacy was drafted and presented to the Council of the State Association which authorized this committee to proceed as suggested in that report.

At one of the first meetings of the two committees (medical and pharmacy), the representatives of the Ohio State Pharmaceutical Association, at the request of the Policy Committee of the State Association, formulated several suggestions as a basis of closer cooperation.

The major items for study and on which the cooperation of the medical profession was requested were set forth by the committee of the O.S.P.A. as follows:

"*First:* Greater attention at medical colleges to the subjects of pharmacology, therapeutics, and prescription writing.

"*Second:* An advocacy on the part of delegates from Medical Associations attending the Pharmacopeial Convention, for the inclusion of preparations which can be made on a practical basis in retail pharmacies by retail pharmacists.

"*Third:* Restriction of the sale of drugs and medicines inclusive of proprietary medicine to properly qualified persons.

"*Fourth:* Partial formula disclosure in connection with proprietary remedies, showing their potent content without infringing property rights.

"*Fifth:* The dispensing of medicines by physicians in either city or county districts.

"*Sixth:* Limitation and restriction on the matter of counter-prescribing by pharmacists.

"*Seventh:* The chain drug store as a demoralizing factor to legitimate retail pharmacy, and what can be done along educational lines by medical men to give the public a true understanding of the harmful influence of the chain drug store in the drug business."

Careful consideration and thoughtful study was given to the propositions set forth in that statement. The conclusions reached by the Policy Committee and subsequently approved by the Council of the State Association are as follows:

The Policy Committee is in thorough agreement and recommends approval of the request for immediate consideration and helpfulness in the advocacy of a more thorough course of instruction in the writing of prescriptions in the medical colleges of Ohio, as summarized in Item 1. The Committee furthermore offered, with the approval of Council, to endeavor to bring this matter favorably to the attention of the deans and other officers of the Class A medical colleges of the state.

It was recommended that the matter referred to in Item 2 be called to the attention of the physician delegates from Ohio and from the American Medical Association, with a request for thorough and favorable consideration if possible, in presenting the matter at the 11th Decennial Pharmacopoeial Convention to be held at Washington, D. C., May 13, 1930, at which revision in the Pharmacopoeia will be made.

It is the opinion of the Policy Committee that the solution of several of the problems mentioned, especially in Paragraphs 3 and 7 (restriction of the sale of drugs and medicines to properly qualified persons and the harmful influences of some chain store systems and unscientific pharmacies) can be arrived at through cooperation rather than additional legislation. It is possible that some remedial legislation might be necessary to arrive at the solution of the problem set forth in Paragraph 4, for the partial formula disclosure in connection with proprietary remedies to show their potent content without infringing property rights, and in this the medical profession should cooperate.

Problems relative to the dispensing of medicines by physicians and counter-prescribing by pharmacists, as set forth in Paragraphs 3 and 6, can likewise be solved through mutual understanding and cooperation, the Policy Committee believes. It should be borne in mind, of course, in relation to the problem of dispensing of medicines by physicians, that the fundamental purpose of the professions of pharmacy and medicine is for the benefit of sick people, or for the prevention of sickness both to individuals and to society at large. In this setup, the clinician (the physician) who directly serves the patient is the keyman. He must, of course, never forget the reliance he must place upon the laboratory worker and the pharmacist for help in solving the numerous clinical problems. However, with the wide application of physical and psychic methods of treatment in addition to drug therapy, and with the management of each individual case —hygienic advice, diet, rest, exercise and alertness for symptoms, danger signs and complications—and especially in emergencies and largely in general practice when immediate administration of drugs and medicines is indicated, there is a reasonable and justifiable field for the dispensing of medicine by physicians which need not and should not interfere with the legitimate field of the pharmacist. This is especially true in rural districts and with physicians in general practice.

On the other hand, the physician should send to the druggist all prescriptions for surgical dressings or supplies, or compounds that require technical skill in their preparation, for infant foods, etc., and, in fact, for a very large proportion of the medical remedies his patients require, including subsequent repeated supplies of practically all preparations and medicines such as are dispensed through necessity by physicians in small quantities for immediate use in emergencies.

In order to merit the confidence and esteem of physicians, pharmacists should resolutely refrain from counter-prescribing, unauthorized substitution of drugs and from the filling of prescriptions not signed by physicians. They should consider every prescription received as a privileged professional communication and treat it as such by guarding it strictly from prying eyes and refusing to reveal its contents to anyone, unless ordered to do so by competent legal authority or advised, in writing, of the prescriber's willingness that it should be done. Any druggist who will adopt these policies and who will, in addition, undertake to keep on hand a fresh and potent supply of the remedies which the physicians he serves are prescribing rather regularly, should experience no difficulty in enlisting the hearty support and cooperation of medical men.

In connection with this general problem, it may be proper to mention the three types of practices in which some pharmacists indulge and against which physicians properly complain. These are counter-prescribing, substitution and unauthorized filling and refilling of prescriptions. These violations which are sometimes illegal, as well as unethical, are, of course, not geenral, but they constitute one of the causes for the large amount of otherwise unnecessary and unjustifiable dispensing of medicines by physicians.

There are a number of other reasons for dispensing by physicians, including economic and scientific developments such as standardized non-secret formulas and biologic products more practically produced in quantities, than could be compounded or produced by individual pharmacists. Dispensing of drugs and compounds by the doctor is largely due to failure on the part of medical schools to properly instruct in the art of prescription writing, a condition which can only be overcome by an improvement in this respect in the curricula of medical colleges. In this connection it should also be urged that the pharmacy schools should emphasize the fact that the unauthorized refilling of prescriptions is unethical, and as a practical step toward curing this evil, it is suggested that printed prescription blanks for physicians' use might bear a printed line—"Not to be refilled unless ordered by the physician".

As pointed out by members of the committee of the Ohio State Pharmaceutical Association and acquiesced in by representatives of the Ohio State Medical Association at the conferences, a large part of the solution of these problems is to be found in an effort by pharmacists to render thorough, accurate and ethical service to physicians in the conduct of their individual cases. Many instances can be cited of successful, qualified pharmacists who through personal contact with the physicians in their respective communities, and through the demonstration of a willingness to cooperate thoroughly, have found their success insured.

This committee realizes that in spite of the commercialism of the present economic era, the qualified ethical pharmacist deserves and will continue to deserve recognition and respect as one who has an important part to play in public health and public welfare.

It is unfortunate that there has arisen between medicine and pharmacy occasional differences, most of which can be avoided and eliminated through a more thorough understanding, mutual cooperation and adherence by the members of each of these two professions to their respective principles of ethics.

It is recommended that in each community closer contact be established, perhaps through occasional joint meetings of medical and pharmaceutical societies, for a discussion of mutual problems and for a discussion and understanding among members of the medical profession, in the various communities, of the legitimate field of pharmacy which should be respected. Through such understanding, those pharmacists who most deserve cooperation, patronage and support will be accorded what they deserve. This, to a large extent, will do away with the demoralizing factor mentioned in Item 7, wherein drug stores with inadequate and only occasional service of registered pharmacists, through a chain system or otherwise, will be deprived of the legitimate prescription business which should go to the earnest, conscientious, qualified professional pharmacist. It might be added that a more strict adherence to and enforcement of state laws on this subject would be mutually beneficial to both professions as well as to the public.

PUBLIC HEALTH ACTIVITIES

Important questions calling for expressions of policy in the field of public health are constantly arising, increasing many-fold the work and responsibilities of this committee.

No group is more vitally interested in *public health* than the medical profession. Its importance to the prosperity and safety of any government and the economic and social welfare of any nation has long been recognized by the medical profession who initiated it, cared for it in its infancy and is now endeavoring to give it the wise and able leadership which it needs and deserves.

The increase of "health conscienceness" on the part of society during the past few years has played a big part in the development of public health activities and been an incentive for an expansion of public health programs both of official and unofficial agencies.

Unfortunately, in some instances this rapid development has led to overenthusiasm and overstimulation in a field which above all others must be guided by conservative, judicious, sound and rational leadership. Also, expansion of public health work has resulted in some cases in encroachments on the work of, and the field occupied by the private practitioner of medicine, and in attempts to standardize medical practice; to bureaucratize medicine, making it a function of the state; to undermine public confidence in the general practitioner, and to pauperize society generally through socialization of medical service.

Naturally, with the rapid progress in preventive medicine and public education, certain readjustments in the field of public health have been necessary. Readjustments that have been founded on the proper principles of scientific medicine, good medical practice and the able group-thought of the medical profession have proved beneficial to the public health administration. Those programs which have not had the cooperation and support of the medical profession, and properly so,—are those which have extended public health activities beyond the limits of educating the public in community and personal hygiene; which have established free clinics and demonstrations for the practice of medicine in competition with the private practitioner; which have inharmonious theories or individuals, and have created misunderstandings between the public and the medical profession.

A concrete example of some of the complex questions relative to the proper relationship which should exist between public health authorities and the medical profession and which call for expressions of policy from this committee is the matter involving the course which should be pursued in immunization against diphtheria.

As pointed out in the November, 1929, issue of

The Journal, pages 895-898, the general policy on immunization in Ohio is for a general and consecutive campaign of education in the various localities by the local health authorities in cooperation with the practicing physicians; specific policies on methods of administration to be established to a large extent by mutual understanding between the physicians of the community and the local health officers.

As emphasized in the article published in *The Journal*, it has always been deemed quite proper for public health officers to provide immunization to those who are unable to pay for it, as well as to provide other services to indigents. On the other hand, the policy of the State Association on this specific question also has contended that public health officials should confine their activities on general immunization to education of the public on to the value of immunization and to issuance of warnings to have all children immunized by family physicians, unless the physicians of the various communities by agreement consent to or request general immunization by local health authorities.

The general policy of the State Association toward proper limitation on public health activities, as already expressed by the House of Delegates, has guided this committee in its discussions of this and other important public health problems and is repeated herewith as a matter of emphasis:

"The medical profession of Ohio, for the public good, and to promote scientific medicine and preserve professional integrity, expresses its opposition to medical service rendered to individuals and groups (other than to indigents) on a wholesale or mechanistic basis, at public expense.

"Only such public health clinics, restricted to educational purposes, are approved, which are held under the direction and general supervision, or with the official approval of the county medical society or academy of medicine in whose jurisdiction such clinics are held.

"Public health administration, maintained at public expense, shall not 'practice medicine'.

"And that the examination of patients and diagnosing of disease or physical impairment is hereby understood to be an integral part of 'medical practice'."

Public health activities, whether official or non-official, which do not adhere to the principles laid down in this pronouncement of policy do not deserve and should not receive the support and cooperation of the medical profession and the public.

In conclusion, your committee wishes to again thank the officers, committeemen and members of the component county medical societies for their loyal cooperation with this committee in carrying forward the policies of the State Association during the past year. The need for continuous and even increased activity cannot be overemphasized. The full value of this cooperation has been amply demonstrated in the past and will be needed in even greater degree in the very near future.

Annual Report of the Publication Committee

ANDREWS ROGERS, Chairman (1930) ..... Columbus
A. B. DENISON, (1930) ..... Cleveland
GILBERT MICKLETHWAITE, (1932) ..... Portsmouth
DON K. MARTIN, Secretary ..... Columbus

The Ohio State Medical Journal—your official publication, constitutes, from month to month, we believe, the most complete and adequate report that could be made by this committee.

The Publication Committee charged with the duty of assembling, editing and publishing *The Journal*, has attempted to contribute to medical progress in Ohio by making it outstanding in its particular field and by making it the medium for disseminating a wide variety of information which benefits every member of our State Association.

To keep himself well-informed on the discussions of scientific medicine and surgery, and on the governmental, social, economic, legislative, judicial and industrial factors which affect the practice of medicine, the present-day, active practitioner should devote considerable time to the careful and thorough study of medical literature and the publications sponsored by organized medicine.

An attempt has been made during the past year, as in previous years, to give to the members of the State Association, through *The Journal*, a well-balanced and accurate summary of all new developments affecting scientific medicine; the activities of their Ohio colleagues, and the developments on numerous problems pertaining to medical practice and public health.

During the past 12 months, *The Journal* has presented almost 100 scientific papers of interest to physicians in all fields of practice. Although the large majority of the scientific papers published each year consists of papers delivered before the various sectional meetings at the last annual meeting, members who wish to submit scientific discussions throughout the year are privileged to do so.

Every scientific manuscript is given thorough scrutiny and is carefully edited by the Publication Committee before it is approved for publication. The articles are not only judged from the standpoint of scientific value, but also as to literary style and general interest. A system of double editing is adhered to in order to minimize errors and obtain clarity and brevity. The committee has worked on the theory that every article appearing in *The Journal*, whether scien-

tific or non-scientific, should be of a type which will add value to *The Journal* and be of information to the readers.

In every issue of *The Journal* will be found numerous news notes concerning Ohio physicians, enabling members of the State Association to keep in touch with their colleagues in every part of the state. Activities in the hospital field also are recorded and considerable space is devoted to news of public health work and public health workers in Ohio and elsewhere.

A special section of *The Journal* is set aside each month for accounts of meetings of the component county medical societies and academies, and for advance notices of future gatherings of unusual interest. Secretaries of the various component county societies are urged to cooperate with the Publication Committee in its efforts to make this feature of *The Journal* one of outstanding importance. A record of all transactions at county society meetings, with brief comments on the scientific discussions, should be forwarded promptly to the headquarters of the State Association where articles are assembled for publication.

Numerous special articles of importance to the medical profession and public health generally have been published during the past 12 months. Complex and important social and economic questions affecting medical practice and public health have been discussed and the fundamental policies of the State Association on these subjects reiterated. The activities of those attempting to breakdown the safeguards to public health and shatter the high standards of the medical profession have been recorded and commented upon. Steps taken by organized medicine to counteract the tactics of these destructive groups also have been reviewed.

Governmental developments of importance to the medical profession and public health have been published, along with accounts of new regulations, interpretations and opinions promulgated or handed down by state and national departmental and judicial bodies on subjects directly affecting physicians.

Briefly stated, the Publication Committee has tried to make *The Journal* an official, consecutive and permanent record of the new and outstanding developments in the field of scientific medicine; the activities of the medical profession in Ohio, individually and collectively, and a source of ready reference to the attitude and policies of the State Association toward the important and current problems and questions affecting medical practice and public health. The committee recommends that every member keep a bound file of *The Journal* in his library as frequently references are made to articles and analyses in preceding issues.

Every effort has been put forth to keep the advertising columns of *The Journal* above criticism. Many advertisements submitted to the Publication Committee are first turned over to the Cooperative Advertising Bureau of the American Medical Association or to the A.M.A. Council on Pharmacy and Chemistry for censorship. Afterwards they are checked carefully and thoroughly by this committee. Advertisements with exaggerated claims for products are not accepted. All displays must be dignified in style and content. Because of this careful system of censorship, only reputable advertisers gain admission to *The Journal*. Therefore, they deserve the support and consideration of the readers.

Attention is given at all times to the make-up and typography of *The Journal*. Changes in both have been made from time to time during the past year to keep the appearance of *The Journal* neat and fresh, make it more easily read, and stimulate reader-interest.

The Publication Committee believes that *The Journal* has grown in prestige during the past year and that it continues to rank among the leaders in its particular field. Its importance to the physicians of Ohio can not be too frequently emphasized. The future growth and strength of *The Journal* will depend on the cooperation and interest of the members of the State Association. Every member is urged to read and file it each month; and to offer comments and suggestions for improvements. *The Journal* is the voice of the State Association. It is *your* publication. Make use of it and make it serve you.

Annual Report of the Committee on Medical Defense

J. E. TUCKERMAN, Chairman, (1931) ..... Cleveland
F. P. ANZINGER, (1932) ..... Springfield
W. H. Snyder, (1930) ..... Toledo
DON K. MARTIN, Secretary ..... Columbus

Talk *is not cheap*, but silence *is* golden. Careless, thoughtless and sometimes even vicious remarks by one or more physicians against another physician constitute the chief cause of the increasing number of unwarranted suits and of threats of suits for alleged malpractice. Such suits and even threats, that may not develop into suits, are damaging not only to the defendant physician, but to the entire profession in any community. Moreover, malpractice suits usually run in epidemics. One such suit in a county is usually the forerunner of and the "suggestion" to other similar suits against other local physicians.

Experiences of the Medical Defense Committee of the Ohio State Medical Association over a considerable period of time indicates that many phy-

sicians have not paused to reflect either upon their responsibility to their colleagues nor upon the legal aspects of their profession until one of their number finds himself playing a leading role in a malpractice drama.

The apparent disregard on the part of many physicians of the well-established fact that practically every act which he performs in the practice of his profession is conditioned on and subject to some well-defined principle of law is unfortunate, and leads this committee to believe that one of its chief functions is to emphasize and stress the importance of every physician having a working knowledge of some of the vital principles of medico-legal jurisprudence.

The primary purposes of this report are:

1. To stress some of the common causes of malpractice suits.

2. To point out to the membership of the State Association how to guard against and prevent suits and threats, both against themselves and against their colleagues.

3. To instruct physicians as to what steps to take if sued.

This committee has noted that with the increasing number of articles in lay magazines and other publications containing comments adverse to the medical profession, and with the economic uncertainties of the present time, there has been a very evident increase in the number of patients who are attempting either to avoid payment of just fees or who are encouraged to hope for gain through damage suits against physicians for alleged malpractice.

Experience has shown that practically all civil malpractice suits are unjustified and, in effect, are efforts by disgruntled individuals to bleed physicians of money or to ruin professional reputations.

Comparatively few suits alleging malpractice are sustained in the courts. However, every threat made or suit filed casts an unpleasant reflection on the reputation of the individual physician and tends to shake the confidence of the public in the entire medical profession.

The growing craze for quick and easy wealth; the false assumption held by many that physicians can and should guarantee their work; the greed of ambulance chasing and contingent fee lawyers; the vituperation of quacks and cultists; and especially the vicious or even the thoughtless, remarks and criticisms by physicians concerning fellow physicians, have been responsible for most of the malpractice suits. Naturally, some suits for damages against physicians are based on fairly substantial and reasonable evidence of carelessness or neglect, but these are few and far between compared to those which are founded wholly on a malicious attempt to blackmail or persecute a reputable, honest and valuable practitioner.

PREVENTION

However much this committee may eternally emphasize precaution both in services rendered and comments made; however much we may collectively deprecate the occurrence of malpractice claims, the prevention of such claims depends upon the daily conduct of the individual physician.

The physician's understanding of the obligation which he assumes; his observance of fundamental principles; the care with which he renders service; and the caution with which he guards his tongue—these are the measure of his contribution to the prevention of hold-up malpractice schemes.

Every physician should realize that the moment he undertakes to care for a patient he at once incurs a contractural obligation to exercise an average degree of skill, care and diligence in diagnosis and treatment. The legal counsel for the Ohio State Medical Association has outlined this legal responsibility and liability of the physician as follows:

Legally, a physician is not required to take a case unless he so desires. If he accepts the employment, he contracts to bring to it the average degree of skill, care and diligence exercised by the members of his profession in the same and similar locations or localities, in the light of the present state of medical science. He cannot abandon the case without cause or without proper notice to the patient. He must follow the approved methods of treatment, and if there be more than one approved method, he must use his best judgment in determining which method to follow. He must give the patient proper instructions as to the care, attention and caution to be exercised by the patient in his absence. He must attend with sufficient frequency and it is for the physician to determine when no further attention is required. He must use care in the selection of his assistant, or of another to perform an operation which may be necessary. He is liable for the acts of his assistant or for another employed by him, so long as they are jointly engaged, and is liable for the acts of an assistant or intern acting under his direction.

Not only that the patient may be assured proper treatment and his interests conserved, but that the physician may be adequately protected in event of litigation the committee suggests that the following points be kept in mind:

1. In a doubtful case either as to diagnosis, treatment, or probable outcome, consultation should be not only welcomed but requested.

2. Where the patient or immediate relatives are obviously dissatisfied do not hesitate to retire from the case. In the long run it is better for all concerned for the patient to have entire confidence in his attendant.

3. If a patient refuses to follow your advice in an essential matter even though it does not seem feasible to withdraw from the case be sure to make a record of those present at the time of the refusal and see to it that you have reliable witnesses to the advice given by you.

4. In surgical cases be sure that those engaged in or assisting at the operation are competent and qualified, that their duties are properly performed and that approved methods of operating room procedure are followed. Keep careful records of the essentials as to treatment given

whether in the hospital, office, or home of the patient.

5. Keep your knowledge of medical subjects fresh and up to date. While in general antiquated methods must be avoided yet new procedures should not be adopted in general practice before sanctioned by adequate clinical experience. "Be not the first by whom the new is tried nor yet the last to lay the old aside."

6. Be conservative in prognosis. Too great optimism too often creates false expectations and later disappointment. Unless in the interest of the patient over statements should always be avoided but if necessary, then the truth should be told to the relatives most closely concerned.

7. Where indicated make use of the *X*-ray, and always when possible in fracture cases. Films so taken should be kept on file.

8. And not least important, never criticize the services of another physician unless absolutely certain that such criticism is just and in the interest of the patient. Careless remarks often result seriously and become the direct instigating cause of litigation.

THE MEDICAL DEFENSE PLAN

The medical defense plan of the Ohio State Medical Association (which is not and should not be considered insurance as this term is applied to indemnity) was established in 1916 to protect the profession as a whole by emphasizing precautionary measures, as outlined above, and by making it possible for every member of the State Association to have adequate defense in case of suit. The Medical Defense Committee in administering this plan always has insisted that all suits filed should be fought through to the last court if necessary, to protect the individual physician and the profession against unjust actions and accusations.

The question frequently arises as to whether or not the medical defense plan is of value to members who carry indemnity insurance against malpractice. *The answer is decidedly in the affirmative*, for the "defense plan" not only gives additional protection, but aims, as pointed out previously, at the prevention of suits. Although the Association is barred, under the defense regulations, from contributing expenses in a defense conducted by an insurance company, the Committee on Medical Defense offers every assistance possible to facilitate the preparation of the defense, including corroborative testimony, and through the counsel for the Association, protects the member if any question arises as to his rights under a particular policy.

Likewise, when principles of law affecting malpractice actions are at stake, or where a judicial interpretation has not been made on a particular point, or where an adverse decision in a suit would establish a precedent involving the interests of the entire profession, the Medical Defense Committee has and will continue to participate in the defense of such suits even when those cases are primarily in the hands of indemnity companies.

Moreover, the knowledge that a physician member of the State Association has the moral support of his fellow members behind him, exercises a wholesome restraint on those who would "get rich quick" at the expense of the professional reputation of physicians.

This committee wishes again to call the attention of the members of the State Association to the following comments on indemnity insurance for physicians, contained in a report of the Bureau of Legal Medicine and Legislation of the American Medical Association:

"It is important to remember that *insurance* against loss through malpractice claims does not prevent and apparently does not diminish such claims. It may be questioned, indeed, whether it does not promote claims and stimulate the awarding of larger verdicts. . . . Insurance cannot do away with the need for the establishment and maintenance of medical defense committees by our several state associations. Not only should such committees be active in cooperating with insurance companies in protecting the members of the association, but they should be even more active in studying the origins of claims for malpractice with a view to instituting preventive measures."

A tabulation of suits and threats against members of the Association reported to the Medical Defense Committee since 1916 and including the first three months of 1930, follows:

Year	*Suits*	*Threats*
1916 to 1920, inclusive	53	43
1921	18	9
1922	15	15
1923	10	10
1924	14	7
1925	13	10
1926	18	16
1927	10	9
1928	21	7
1929	23	16
1930 (Jan. to March)	8	7
Totals	203	149

An analysis of these suits and threats reveals that indigent patients are the most liable to sue; that fractures or unsuspected fractures are the basis of over 50 per cent of the claims; and that suits and threats of suits in general are occasioned through one or more of the following causes:

1. Ill-advised and unjustified comments of colleagues. This is the most serious and primary cause.
2. Hope of individuals (dissatisfied patients and plaintiff attorneys) to profit.
3. Desire to injure defendant's professional reputation.
4. Criticisms by relatives and friends of patient.
5. Carelessness and negligence of defendant, superficial examinations and service.
6. Failure to keep accurate records.
7. Negligence of assistants.
8. Failure of patient or family to carry out defendant's instructions and advice.

THOSE ELIGIBLE TO DEFENSE

Eligibility of a physician to the medical defense plan of the State Association depends first of all upon continuous membership in his county

medical society and the State Association. The State Association cannot assume the defense of a member if he is in arrears with his dues at the time of the alleged malpractice, at the time the threat of suit or the action itself is filed, or if the alleged cause of the suit occurred before the defendant became a member of the State Association. The date accepted to govern these requirements is the day, month and year the dues to the State Association were received at the State Association headquarters from the secretary-treasurer of the county medical society. Annual dues in the State Association are due on or before January 1 of each calendar year.

The Association moreover will not contribute to the defense of any member who:

Fails to forward a medical defense application blank, properly filled out, to the State Association offices within ten days after the service of summons.

Does not take, or have taken and keep on file, or have available *X*-ray pictures of fracture cases, unless it can be shown that at the time and place it was impossible to secure an *X*-ray plate.

Has brought on "cross complaint" by filing a suit to collect a bill within one year of the termination of his services.

Is believed guilty, after careful investigation, of illegitimate professional actions or service.

When sued or threatened with a suit, each member should immediately notify the Executive Secretary, Ohio State Medical Association, 131 East State Street, Columbus, Ohio, requesting medical defense blanks. Upon receipt of these, the member should furnish the information requested, in duplicate. One of these blanks (when filled out) must be sent to the chairman, Dr. J. E. Tuckerman, Osborn Building, Cleveland, Ohio, and the other to the State Association offices.

If the physician is eligible to defense under the Rules and Regulations, this committee provides the necessary legal talent and makes every effort possible for a successful defense. Designation of local attorneys and their employment is entirely in the hands of the counsel for the committee. The Association will not contribute attorney fees incurred in the defense except those of attorneys regularly approved.

Since the defense plan is not indemnity *insurance*, court judgments cannot be paid. If the defendant carries indemnity insurance, as pointed out previously, the State Association cannot contribute expenses toward defense, but it will assist in every other possible and proper way.

In conclusion, the Medical Defense Committee again urges the members of the State Association to lend their cooperation to the *program of prevention* sponsored by the committee. Careful attention to the principles, rules and suggestions set forth in this report is certain to result in a decrease in the number of malpractice suits and threats, and consequently in the elimination of much unfavorable publicity which does unjust injury not only to individual physician, but the entire medical profession.

Annual Report of Committee on Medical Education and Hospitals

BEN R. MCCLELLAN, Chairman, (1931)..... Xenia
R. H. BIRGE, (1932)..... Cleveland
C. E. KIELY, (1930)..... Cincinnati
DON K. MARTIN, Secretary..... Columbus

The broad field of education, including medical education, is in a stage of transition. Adjustments have been found necessary to meet the demands of progress. Many confusing problems have arisen, for which satisfactory solutions are being sought. Serious study is being devoted to this important question in order to minimize mistakes in the readjustments which are inevitable.

As one well known physician and surgeon recently pointed out in discussing the changing character of medical education: "It will take the best minds in the medical profession to solve the many problems which immediately confront us".

The Committee on Medical Education and Hospitals of the State Association, created for the purpose of studying and analyzing current trends in medical education; offer suggestions and advice on the problems arising, and obtaining data on Ohio hospitals for the Council on Medical Education and Hospitals of the American Medical Association, has devoted much study during the past 12 months to these various questions. Considerable data has been turned over to the A.M.A. Council on Medical Education and a few of the observations made are reflected in this report.

OHIO'S MEDICAL SCHOOLS

Investigation shows that Ohio's three Class A medical schools—Western Reserve University, School of Medicine; University of Cincinnati, College of Medicine; and Ohio State University, College of Medicine—are keeping step with the advances being made in medical education generally.

The three Ohio schools are continuing to adhere to the policy of quality, rather than quantity production, and rightly so. Applicants to each are carefully scrutinized, which accounts for the fact that a great majority of those entering continue through to graduation. Opportunities to enlarge their plants and expand their facilities have not been overlooked, but such expansion has remained secondary to the primary objective of making each graduate a well-educated and competent physician.

Despite the high qualifications demanded of applicants, statistics show that each year the three Ohio medical schools are graduating enough students to assure Ohio of an adequate supply of practicing physicians. Additional data on medical education in Ohio, published in the October, 1929, issue of *The Journal*, about the time the three schools convened for the school year, 1929-30, should be considered a statistical supplement to this report.

MEDICAL EDUCATION PROBLEMS

Many of the intricate questions confronting medical educators have been reviewed by this committee and keen interest has been recorded in some of the proposed solutions and some of the experiments initiated.

Numerous experiments in medical education, to put to a practical test some of the newer principles of medical training, are now underway in various sections of the country. Probably one of the most comprehensive and complete surveys of the current trend in medical education is that recently conducted by the Commission on Medical Education and summarized in a supplement to the Third Report of the Commission.

One chapter in the study was devoted to the subject of pre-medical training, the features of which are attracting widespread discussion. Some of the conclusions of the Commission on this phase of medical education might be summarized briefly as follows:

1. More attention should be given to the total science preparation rather than to specific hour requirements in individual sciences.

2. Matters of pre-medical requirements should be left to individual schools; early education should be prescribed only in general terms.

3. Preliminary requirements should not be too high "for credit hours and college courses are not infallible devices to measure native ability, intelligence or character".

4. Minimum preliminary requirements fixed by the A.M.A. are probably sufficient and the most fair to the prospective student.

5. Content of pre-medical sciences should be worked out by a joint committee of teachers in the preliminary and medical sciences; liaison personnel between the medical and college faculties is recommended.

6. Length of pre-medical education will be largely influenced by reorganization of primary and secondary education through the development of junior and senior bigh schools and junior colleges; a reduction in pre-professional education is likely to result.

The Commission's report recommends that medical schools extend courses in preventive medicine, especially that phase of preventive medicine which concerns itself with the protection of the individual through immunology, proper hygiene and individual care.

Timely comments on medical licensure were made, including a plea for uniformity in the licensing of practitioners. Concerning the establishment of basic science boards to meet the problem of limited practitioners and cultists, the report said:

"The fact that 96 per cent of the candidates appearing before these basic science boards are graduates of Class A medical schools and tbat they must submit to further examinations conducted in the sciences witbout relationsbip to clinical problems is carrying a compromise to the point of penalizing well-trained physicians without much insurance of protecting the public by so going. * * * The conduct of examinations by basic science boards in some states is contrary to the trend in medical education as well as in examinations for licensure and only tends to postpone sound procedures."

On the subject of intern training, the report commented as follows:

"There is general agreement that practically all medical students should have an internship before they begin practice and that this hospital period should be considered as an integral part of the basic training. As a matter of fact, 95 per cent of graduates take an internship."

Other angles of the question of medical education were discussed, some of which were:

Correction of overcrowding by reduction of amount of required work and elimination of unimportant features.

Modification of the content of courses, as for example greater emphasis on the living human organism in anatomy and physiology and on the physiological effects of drugs in pharmacology.

Efforts to overcome the isolation of the medical sciences and bring about their correlation.

Development of different devices for securing a bridging from the medical sciences to their clinical application.

The increasing cost of medical education and its effect on student enrollment.

Your committee believes that some of the experiments underway will be of great value in clearing up a number of the confusing problems in medical education. It also believes that some of the innovations will be found impractical and detrimental, and will finally be abandoned.

Modification and revision of professional training so as to permit it to embrace the newer developments in education generally should by all means be accomplished when the need is evident, your committee believes. Some revision may be necessary at the present time. However, the committee is of the opinion that no permanent changes should be made until they have been thoroughly tested and found to be in the interests of betterment and progress in scientific medicine and medical practice. Modification must be accomplished slowly and only after serious study and experimentation.

As a practical feature in medical training, this committee believes that an effort should be made by our medical schools to encourage and, if possible require each undergraduate medical student to place himself under the tutelage of an approved general practitioner during vacation periods for clinical experience as well as to acquaint himself with the economic and social relationship between the practicing physician and his clientele.

NATIONAL STATISTICS

Analysis of figures compiled by the A.M.A. Council on Medical Education and Hospitals relative to applications, enrollments and graduates at the 75 recognized Class A medical schools in the United States offers some interesting as well as informative data on medical education generally and indicates that the demands of the population for increased competent medical service are being met.

The total number of medical students in the United States for the year ending June 30, 1929, excluding premedical, special and post-graduate students, was 20,878, an increase of 333 over the previous year. This was the largest enrollment of students since 1910, when 21,526 students were recorded.

The total number of graduates for the year ending June 30, 1929, was 4,446, or 184 more than were graduated during the year ending June 30, 1928. New York State furnished the largest number of students during the year ending June 30, 1929, students from that state totaling 2994. Pennsylvania was second with 1820; Illinois third with 1304, and Ohio fourth with 1227.

Total enrollments of students by classes in the Class A medical schools also showed increases during the year 1928-29. The total attendance for the first year was 6277, or 78 more than the previous year; for the second year, 5304, a gain of 114; for the third year, 4746, a gain of 100, and fourth year, 4551, a gain of 41. It also is interesting to note that 66.4 per cent of all graduates during the year ending June 30, 1929, held collegiate degrees, as compared with only 15.3 per cent in 1910.

It is the opinion of this committee that the matter of medical education costs, both from the standpoint of the college and the student, must be watched and studied carefully by medical educators. Any tendency to place too great a financial burden on the shoulders of the medical student is certain to delete the ranks of prospective physicians to a dangerous point and would tend to make the profession of medicine an aristocracy, which should be avoided.

POST GRADUATE STUDY

It is gratifying to note that more attention on a nation-wide scale is being given to post-graduate medical training, now recognized as one of greatest importance in bridging the gap between present-day knowledge of diagnosis, treatment and prevention and its application to the needs of individuals and communities. New plans are being devised to stimulate practicing physicians to keep abreast of new information on scientific medicine.

As pointed out in previous reports of this committee, more extensive post-graduate systems might well be developed in Ohio. Much can be accomplished by carefully arranged scientific programs at county society meetings; properly conducted clinical demonstrations and exhibits at hospitals; short courses in medical extension work by Ohio's medical colleges; increased facilities at the schools for resident post-graduate work for their graduates, and use of a practical preceptor system during vacation periods.

Some of these plans and methods are now in use in Ohio, but it is the belief of this committee that certain phases of this work could be expanded and extended, especially from the medical schools as the natural teaching centers.

STATUS OF OHIO'S HOSPITALS

As pointed out previously, one of the major duties of this committee is to accumulate information on and study the operation of the hospitals in this state, and keep in touch with changes which are taking place in the hospital field generally throughout the country.

At the present time there are 33 Ohio hospitals approved by the Council on Medical Education and Hospitals of the American Medical Association for intern training. The Ohio hospitals now so recognized are:

City Hospital	Akron
Bethesda Hospital	Cincinnati
Christ Hospital	Cincinnati
Cincinnati General Hospital	Cincinnati
Deaconess Hospital	Cincinnati
Good Samaritan Hospital	Cincinnati
Jewish Hospital	Cincinnati
St. Mary's Hospital	Cincinnati
City Hospital	Cleveland
Lakeside Hospital	Cleveland
Mt. Sinai Hospital	Cleveland
St. Alexis Hospital	Cleveland
St. John's Hospital	Cleveland
St. Luke's Hospital	Cleveland
St. Vincent's Charity Hospital	Cleveland
Woman's Hospital	Cleveland
Grant Hospital	Columbus
Mt. Carmel Hospital	Columbus
St. Francis Hospital	Columbus
Starling-Loving Hospital	Columbus
White Cross Hospital	Columbus
Miami Valley Hospital	Dayton
St. Elizabeth's Hospital	Dayton
Elyria Memorial Hospital	Elyria
Mercy Hospital	Hamilton
Springfield City Hospital	Springfield
Flower Hospital	Toledo
Lucas County Hospital	Toledo
Mercy Hospital	Toledo
St. Vincent's Hospital	Toledo
Toledo Hospital	Toledo
St. Elizabeth's Hospital	Youngstown
Youngstown Hospital	Youngstown

Ohio hospitals approved by the A.M.A. for residencies in specialties, three of which were approved during the past year, are:

Children's Hospital	Akron
Children's Hospital	Cincinnati
Cincinnati General Hospital	Cincinnati
Cincinnati Sanitarium	Cincinnati
Deaconess Hospital	Cincinnati
Good Samaritan Hospital	Cincinnati
City Hospital	Cleveland
Cleveland State Hospital	Cleveland
Lakeside Hospital	Cleveland
Mt. Sinai Hospital	Cleveland
St. Alexis Hospital	Cleveland
St. Ann's Maternity Hospital	Cleveland
St. Vincent's Hospital	Cleveland
Babies and Children's Hospital	Cleveland
Columbus State Hospital	Columbus
Dayton State Hospital	Dayton
Massillon State Hospital	Massillon
Ohio State Sanatorium	Mt. Vernon
Toledo State Hospital	Toledo
Women's and Children's Hospital	Toledo

Seventy-one hospitals of Ohio have state accredited nurses' training schools and five others are affiliated for nurse training on a state accredited basis. All but six of these training schools require four years of high school work as a prerequisite to entrance. Between 6,000 and 7,000 graduate nurses are estimated at the present time to be engaged in actual practice.

The large majority of these are members of the Ohio State Nurses' Association, which on

March 1, 1930, had a membership of 5381. At the last examination given by the Nurse Registration Bureau, of the State Medical Board, in December, 1150 nurses were granted licenses. A comparison of this figure with the number of successful applicants in 1923—482—shows the growth of the nursing profession in Ohio during the past seven years.

HOSPITALS CLASSIFIED

The 1929 report of the Bureau of Hospitals of the State Department of Health lists 350 Ohio hospitals. Of this number 277 with a bed capacity of 44,857 have met the requirements of the Council on Medical Education and Hospitals of the A.M.A. and are approved as registered hospitals. Those registered by the State Department of Health total 310. Those licensed by the state to do maternity work number 202.

The State Department's report classifies the hospitals of the state according to service as follows: 30 general; 165 general and maternity; 37 maternity; 15 tuberculosis; 23 mental and nervous; 16 aged and convalescent; 31 special; 9 children's; 16 state institutions, and 8 miscellaneous.

The average daily cost for each patient in these Ohio hospitals during 1928 was $5.31, a total cost of $27,434,444.22. There were 5,166,562 days treatment given to 355,978 persons.

The total number of hospital beds in the state, exclusive of state institutions during 1929, was 24,260, of which 17,117 were in general hospitals. There were 3,743 maternity beds in general and maternity hospitals and 2,446 beds for tuberculosis patients.

Hospitals of 500 beds or more had the lowest per capita day cost, the average daily cost being $4.28; those of 1 to 25 beds having the highest, with a figure of $6.44.

The average per capita cost for maternity hospitals, including refuge homes, was $1.80. The average number of hospital days of each patient was fourteen and one-half days.

Complete figures on the average per patient day cost for all types of Ohio hospitals according to bed capacity and as to type of service follow:

Beds 500 or more	$4.28
Beds 301-500	$5.23
Beds 201-300	$5.11
Beds 101-200	$6.06
Beds 51-100	$4.78
Beds 26-50	$5.31
Beds 1-25	$6.44
General	$6.05
Maternity (not including General and Maternity)	$1.80
Tuberculosis	$3.17
Children's	$4.12
Nervous and mental (not including state inst.)	$7.49
Special	$12.32
Aged and convalescent	$4.71

An analysis of the hospital field, made for the Committee on the Cost of Medical Care preliminary to a study of capital investment in hospitals, reveals some interesting data on the control of hospitals.

The survey of 6852 hospitals listed by the American Medical Association shows the following:

294 hospitals, 4.3%, with 61,765 beds, under federal control.

595 hospitals, 8.7%, with 369,759 beds, under state control.

489 hospitals, 7.1%, with 63,231 beds, under county control.

372 hospitals, 5.4%, with 65,126 beds, under city control.

63 hospitals, 0.9%, with 7,553 beds, under city and county control.

1,056 hospitals, 15.4%, with 114,613 under church control.

2040 hospitals, 29.8%, with 158,832 controlled by independent associations.

1699 hospitals, 24.5%, with 39,710 beds, controlled by individuals or partnerships.

157 hospitals, 2.3%, with 7047 beds, under industrial control.

87 hospitals, 1.3%, with 5298 beds, under fraternal control.

HOSPITAL CONTACTS

The relationship between the well-conducted, and well-equipped community hospital and medical service should not be overlooked. The hospital's part in post-graduate medical instruction is a large one. There is also a very definite relationship between the location of hospitals and the distribution of physicians. Physicians are much more likely to settle in communities served by an up-to-date and well equipped hospital than in isolated districts many miles from such an institution. Some authorities believe that a solution to the question of rural medicine hinges largely on the future development of hospitals in outlying communities.

A survey of Ohio taken not long ago, revealed that 18 counties in the state are without hospital facilities of any sort, and that all but one of these 18 counties have a percentage of physicians to population much lower than the average for the state.

The importance of hospital connections for the physician was emphasized in a recent report of the A.M.A. Council on Medical Education and Hospitals as follows: "There is a reciprocal relation between the modern scientifically trained physician and the modern highly equipped hospital; each makes the other possible and each makes the other necessary".

Neither the physician nor the hospital can assume a detached interest in the problems of either, and certainly there must be present a spirit of constructive cooperation in seeking solutions for mutual questions.

There were approximately 31,500 motor vehicle deaths in 1929, compared to 27,966 in 1928, according to an estimate made by the National Safety Council, based on data secured from four authentic sources.

The following have been granted medical and surgical licenses through reciprocity by the State Medical Board: Rudolph F. Kurv, Cincinnati, University of Louisville, and John C. McGuire, Cincinnati, University of Louisville.

Annual Report of the Committee on Periodic Health Examinations

V. C. ROWLAND, Chairman ..... Cleveland
H. J. POWELL ..... Bowling Green
C. A. NEAL ..... Columbus
WILLARD G. DROWN ..... Warren
E. B. SHANLEY ..... New Philadelphia
DON K. MARTIN, Secretary ..... Columbus

Society's growing interest in the important task of checking and eliminating, so far as possible, the diseases and ailments which are levying annually a tremendous toll of death, human suffering and economic loss has marked the present period of preventive medicine as an epoch in medical history.

No one who devotes any considerable amount of study to a recent report on the extent of illness in the United States compiled for the Committee on the Cost of Medical Care can doubt the truth of the statement made in that report that "this continuance of disease, part of it preventable, indicates a field for the more widespread and efficient utilization of preventive and curative measures now known".

Data now collected for this national committee by staff members, although admittedly incomplete, seems to indicate that people are, on the average, disabled by illness at least once annually; men about once a year; women from once to twice, and children more than twice each school year of 180 days. Figuring on the lowest rate for disabling illness found in the United States, there would be about 130,000,000 cases of disabling illness in this country each year, the report estimates. What this may mean is indicated by the conclusion that the 36,000,000 wage earners in the United States lose at least 250,000,000 work days a year and the 24,000,000 school children 170,000,000 days of school each year. These figures take into account only half of the total population and do not include nondisabling illnesses.

This preliminary estimate also indicates that many of the 2,000,000 births in the registration area in 1928 were followed by complications and a considerable number by death; that there were over 36,000 cases of smallpox in the United States in a recent year; that hospitals for the mental and nervous diseases contain over 350,000 persons; that the total number of mental defectives exceeds 900,000, the number of blind more than 100,000, the number with major speech defects, 1,000,000, and the number of school children wholly or partly deaf, 3,000,000.

It also is estimated that the number of persons in all hospitals in a single average day is about 700,000; that venereal diseases are causing nearly one person out of every 100 to employ medical attention; that at all times approximately 700,000 persons are ill with tuberculosis, 10,000 with pernicious anemia and 110,000 addicted to narcotic drugs.

Additional light on the demands and needs for medical service is shed by the report of the Commission on Medical Education, made following a comprehensive survey of the practices of numerous general practitioners throughout the country. This study showed that 90 per cent of the illnesses are of types that cannot be controlled on a community basis but are *problems of individual patients* and emphasize the necessity of treating the patient as well as the disease.

The Committee on Periodic Health Examinations of the Ohio State Medical Association has been intensely interested in the information collected by these groups and has devoted much study to the conclusions reached, because of the obvious importance of these figures and data in study of the periodic health examination field.

The functions of this committee include participation in the movement to popularize periodic health examinations and to arouse interest among the members of our profession in this important phase of preventive medicine. As pointed out in the reports of the national bodies quoted above, many of the disabling diseases and illnesses which cause an incalculable amount of human suffering are preventable, not on a community basis but through personal contact between doctor and patient. Your committee believes that the periodic health movement opens the door wider for a greater realization of this personal contact whereby the physical and mental problems of the individual patient can be studied and solved.

The periodic health examination is no longer regarded by the average and wide-awake citizen as a fad or a fancy; something which must be undertaken because it's the "smart" thing to do. It has grown to become a business proposition as evidenced by the increasing number of persons who are anxious at least once year to undergo complete physical inspection. Insurance companies are spending more and more money each year on their efforts to educate their policyholders to the value of the periodic health examination. Hundreds of industrial firms are demanding that all applicants for employment be examined before they are hired and re-examined periodically after they have been placed on the payroll.

Professional activities on a large scale in this work are reported in some scattered sections of the country. Special reference might be made to the cooperative movement in New York State where an expansive program among physicians as well as the public is being carried out. In North Carolina, a state-wide campaign touching every one of the 100 counties was conducted by a whole-time physician employed by the state.

In Cleveland, the Health Council, a lay organization under the Welfare Federation, inaugurated a public educational campaign on periodic health examinations in February, with the approval and collaboration of the Cleveland Academy of Medicine. Their first act was to secure a list of physicians who would cooperate. Prompt response of 650 physicians was received and 3,476 examination blanks in card form (as suggested by this committee of the Ohio State

Medical Association last year) were sent out within the first month.

Publicity in the campaign included articles in newspapers, trade journals, house organs and the distribution of literature. The latter up until March 8, included 91,221 folders distributed in payroll envelopes by 414 Cleveland industries; 4,668 posters mailed out to the Community Fund mailing list; 5,000 dodgers distributed at the Food Show along with 8,000 bulletins; 2,000 bulletins sent to mailing list, and distributed by speakers, and 11,000 cards signed jointly by the Health Council and the Academy of Medicine to be distributed by physicians and reading: "Your health is one of your greatest assets. Conserve it by asking your doctor to give you a thorough physical examination at least once a year". It was thought that the joint signature of the two organizations would be preferable to and displace some objectionable announcement forms which had been distributed by individual physicians.

In general, however, your committee believes that the great mass of the profession is still too indifferent to the movement. Great opportunities are being overlooked by many Ohio physicians in this phase of the field of preventive medicine, the committee thinks. Scores of physicians, busy with acutely ill, are not taking more than a casual interest in examining the supposedly well, thereby missing a chance to render additional service to their patients and at the same time losing an opportunity to extend their practice and enlarge their income.

To amplify these opinions and advice, your committee wishes to quote several paragraphs from a paper written by its chairman and published on pages 40-42 of the January, 1930, issue of *The Ohio State Medical Journal*, which incorporated some of the ideas and suggestions which have been in the minds of the committee in urging greater and more enthusiastic participation of the medical profession in this health examination movement:

"The phase of the whole situation in which we should be most interested is that the profession should not be found wanting in the eyes of an intelligent laity, especially in these days when medicine is undergoing a kind of social and economic inquisition. One of the most unfortunate attitudes that we are apt to take toward this movement or toward the individual seeking a health examination is that of levity or mild ridicule which very effectively dampens the ardor of any patient and especially that of the desirable type of patient. * * * Turning to levity is a venerable form of evasion in situations which we are not prepared to meet. Upon analysis we will find no justification for scorning any form of effective preventive medicine.

"No one can deny that a system of periodic health examinations—whatever its disadvantages or shortcomings—will lead to the discovery of some cases of early tuberculosis, early cancer, untreated syphilis, much neglected focal infection and bad hygiene. * * * If the medical profession is to regard itself as the guardian of the public health, then in the last analysis the responsibility for the enormous human wastage from preventable disease must rest upon the medical profession. * * *

"A large part of the indifference of the profession is of course our traditional conservatism. We forget the lessons of history. We forget that nearly every new movement in medicine has been resisted by many of the regularly constituted authorities. * * * The health examination movement is really the latest phase of preventive medicine to be carried out by the personal cooperation of the public. It is important for us to support this movement whether or not we individually care to do the examinations. Many men in special fields will not care to do them but can readily refer applicants instead of showing indifference or ridicule or otherwise disparaging the idea. Indifference is often interpreted as incompetency."

Your committee contends that the family physician, the person intimately acquainted with the individual, his habits, his mode of living, his hereditary tendencies, etc., is the one who should be charged with the task of making health audits. At the same time, the committee is of the opinion that the family physician must be sincere and sympathetic in his work and do everything possible to make the health examination a thorough and complete one. He also must use good judgment and care in his report to the patient following the examination, for it has been demonstrated that some patients have been caused needless mental distress through ill-timed or thoughtless statements made by the examining physician.

The county medical society can do much to create both professional and public interest in periodic health examinations. Every county society in Ohio is urged to arrange for at least one meeting during the year at which the program is devoted to the subject of thorough routine physical examinations. Meetings to which the public is invited might also be scheduled, these gatherings to be either under the auspices of the county medical society or jointly with civic organizations and local public health authorities. These meetings might also be held under lay auspices with the local profession acting in an advisory capacity.

Many county medical societies are giving considerable attention to the question of health examinations, as evidenced by responses received from a questionnaire sent by this committee to the secretaries of all the academies of medicine and county societies of the State Association recently. The many replies to the questionnaire, broadcast by this committee to find out as far as possible the interest being manifest by the various county societies, showed that in most counties, organized medicine is devoting time on its programs for discussions of the various phases of preventive medicine, immunization, and early diagnosis and treatment. Responses to the questionnaire also revealed that a considerable number of county societies are actively cooperating

with local public health and lay organizations in carrying on periodic health examination education. The general opinion of societies which have held meetings such as those advocated by this committee is that the gatherings have been of much value, both to members of the medical profession and the general public.

The committee recommends to individual physicians that they adopt the condensed, but adequate, health examination form published on page 123 of the February, 1929, issue of *The Journal*, and endorsed by last year's Committee on Periodic Health Examinations.

In conclusion, your committee wishes to urge again that the physicians of Ohio further stimulate their interest in this work of administering to the supposedly well. The world is looking to the physician to take the leadership in this newest phase of scientific medicine just as he should take the leadership in all others.

Annual Report of the Committee on Auditing and Appropriations

S. J. GOODMAN, Chairman ..... Columbus
JOHN A. CALDWELL ..... Cincinnati
C. W. WAGGONER, Ex-Officio ..... Toledo
H. M. PLATTER, Treasurer ..... Columbus

Foresight and care in the administration of the fiscal affairs of any organization are necessary prerequisites to the enduring success of that organization.

The endeavor of this committee has been to keep the financial foundation of the State Association sound through adequate financial supervision, conservation of resources and careful management of income and expenditures.

The committee, through judicious management of the State Association's funds under direction and authorization of the Council, and through effective expenditure of its monies, has been able not only to provide the means for the expansion of the Association's activities, but it also has made possible the accumulation of a substantial accrued unexpended balance in the general funds during the past twelve months.

It is the earnest opinion of this committee that under the funds available, the income derived and the amount expended, medical organization in Ohio has accomplished more and been of greater service to its membership, on nominal dues, than any similar organization anywhere. Much has been accomplished, despite gradually increased costs in maintaining and expanding the activities of the State Association, without increasing dues as has been done in many states. However, it is the belief of this committee that the day is not far distant when the per capita dues of the State Association of $5.00 per year must be increased in order to provide for development and additional activities.

All the routine and mechanical bookkeeping devices necessary for the accurate and efficient maintenance of records have been utilized under the direction of this committee in handling the fiscal and financial affairs of the State Association. Every financial transaction must receive the approval of this committee before it is undertaken or completed. No check can be signed by the treasurer until a proper voucher which outlines the nature and amount of the expenditure has been prepared, presented to this committee and approved by it.

Surplus funds are kept on time deposits and the accrued interest is credited to the Association. All funds above those actually needed for the checking account for current needs are invested in short-time securities, where interest is drawn until the principle is needed for the checking account.

A carefully-prepared budget is drafted by the committee in advance of each calendar and fiscal year. This sets forth the anticipated revenues and expenditures for the new year and serves as a guide for future activities of the State Association. The budget is transmitted to the Council of the Association for criticisms, alteration and official approval. The budget for 1930 and a supplementary report, as approved by the Council, were published in the January, 1930, issue of *The Journal*, Pages 49-50, and should be considered a part of this report.

The expenditures of the State Association for the calendar and fiscal year 1929 were kept within the budgetary allowances and authorizations of the Council, as shown by the report of the certified public accountant employed by this committee at the end of each year to audit the records and financial transactions of the State Association and *The Journal*. The report of the accountant for the calendar year 1929, reflecting the adequacy and efficiency of the financial affairs of the State Association is appended to this report to show graphically the excellent financial condition of the State Association.

The audit of the finances of the State Association and *The Journal* for the calendar and fiscal year 1929, by a certified public accountant, follows:

ACCOUNTANT'S REPORT OF THE OHIO STATE MEDICAL ASSOCIATION FOR 1929.

Chairman, Auditing Committee,
Ohio State Medical Association,
Columbus, Ohio.

Dear Sir:

In accordance with your instructions, we have audited the books of the Ohio State Medical Association for the year ended December 31, 1929, and submit herewith report, including as a part thereof the following described Schedules:

SCHEDULE A: Statement of Cash Receipts and Disbursements for the year ended December 31, 1929.

SCHEDULE B: Statement of Cash Reconciliation at December 31, 1929.

AUDIT—All recorded cash was traced to the depository. All disbursements were verified by examination of cancelled checks supported by vouchers, properly approved. Cash as shown by the bank statement at December 31, 1929, was reconciled with the balance as shown by the books at that date.

Certificates of deposit and United State gold bonds were verified by actual inspection.

CERTIFICATE—We therefore certify that, in our opinion, the statement herein contained correctly states the Cash Receipts and Disbursements of the Ohio State Medical Association for the year ended December 31, 1929.

Respectfully submitted,
KELLER, KIRSCHNER & MARTIN,
Certified Public Accountants.

SCHEDULE A—STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED DECEMBER 31, 1929.

Cash on Hand and on Deposit January 1, 1929		$ 8,723.90
Certificates of Deposit		40,000.00
Total Cash January 1, 1929		$48,723.90
Receipts		
Membership Dues 1928	$ 12.00	
Membership Dues 1929	27,450.00	
Annual Meeting	5,055.25	
Interest	2,005.28	
Total Receipts		34,522.53
Total to be accounted for		$83,246.43
Disbursements		
Ohio State Medical Journal	$ 6,000.00	
Executive Secretary—Salary	6,600.00	
Executive Secretary—Expense	991.71	
Assistant Executive Secretary—Salary	3,500.00	
Assistant Executive Sec'y—Expense	88.25	
President's—Expense	197.39	
Treasurer's—Salary	300.00	
Council	594.03	
Annual Meeting	2,897.34	
Auditing	100.00	
Committee on Public Policy	1,276.78	
Medical Defense	1,107.20	
Miscellaneous Committee Expense	147.65	
Stationery and Supplies	583.06	
Postage and Telegraph	493.02	
Additional Salaries	1,150.00	
General Counsel Salary	1,500.00	
Total Disbursements		27,526.43
Cash on Hand and on Deposit December 31, 1929 (Schedule B)		55,720.00
Total Accounted for		$83,246.43

SCHEDULE B—STATEMENT OF CASH RECONCILIATION AT DECEMBER 31, 1929.

The Huntington National Bank

Balance as shown by Bank Statement at Dec. 31, 1929		$ 1,062.08
Less Outstanding Checks		342.08
Balance as shown by Books at December 31, 1929		$ 720.00
United States Liberty Bonds	$25,000.00	
Certificates of Deposit:		
No. 1326 First Citizens Trust Co.	5,000.00	
No. 26965 Huntington National Bank	25,000.00	
Total Bonds and Certificates of Deposit		55,000.00
Total Balance as shown by the books at December 31, 1929		$55,720.00

ACCOUNTANT'S REPORT FOR THE OHIO STATE MEDICAL JOURNAL FOR 1929

To the Committee on Auditing of the
Ohio State Medical Journal,
Columbus, Ohio.
Gentlemen:

In accordance with your instructions, we have audited the books of the Ohio State Medical Journal, for the year ended December 31, 1929, and submit herewith report, including as a part thereof the following described schedules:

SCHEDULE A: Balance Sheet at December 31, 1929.

SCHEDULE B: Statement of Revenue and Expense for the year ended December 31, 1929.

These schedules are supported by exhibits showing details of various accounts incorporated therein.

Financial Condition

The financial condition of the Ohio State Medical Journal at December 31, 1929, (as shown in detail in Schedule A) was as follows:

Cash on Hand and on Deposit		$ 1,099.50
Accounts Receivable		897.25
Miscellaneous Postage Receivable		20.06
Total Current Assets		$ 2,016.81
Less Current Liabilities		12.00
Net Current Assets		$ 2,004.81
Furniture and Fixtures		1,984.33
Total Net Assets		$ 3,989.14
The above is represented by:		
Surplus		$ 3,989.14

AUDIT—All recorded cash was traced to the depository. The disbursements were verified by examination of cancelled checks, supported by properly approved invoices. Cash as shown by the bank statement at December 31, 1929, was reconciled with the balance as shown by the books at that date. Petty cash vouchers were checked and the amount on hand was verified by actual count.

CERTIFICATE—We therefore certify that, in our opinion, the statements herein contained correctly state the financial condition of the Ohio State Medical Journal at December 31, 1929, and the Revenue and Expense for the year ending on that date.

Respectfully submitted,
KELLER, KIRSCHNER & MARTIN,
Certified Public Accountants.

SCHEDULE A

ASSETS

Current Assets		
Cash—Citizens Trust and Savings Bank	$1,089.50	
Cash—Petty	10.00	
Total Cash		$ 1,099.50
Accounts Receivable		897.25
Miscellaneous Postage—Receivable		20.06
Total Current Assets		$ 2,016.81
Property Assets		
Furniture and Fixtures		$ 1,984.33
Total Assets		$ 4,001.14

LIABILITIES

Current Liabilities	
Subscriptions Prepaid	$ 12.00

SURPLUS

Surplus at December 31, 1928	$4,683.76	
Expense in excess of Revenue for the year ended December 31, 1929	694.62	
Surplus at December 31, 1929		3,989.14
Total Liabilities and Surplus		$ 4,001.14

STATEMENT OF REVENUE AND EXPENSE FOR THE YEAR ENDED DECEMBER 31, 1929.

SCHEDULE B

Revenue			
Advertising		$13,284.10	
Less—Commissions	$991.16		
Cash Discount	464.15	1,455.31	$11,828.79
Circulation			6,000.00
Miscellaneous			111.65
Bad Debts Collected			135.94
Total Revenue			$18,076.38
Expense			
Journal Printing		$11,249.98	
Office Salaries		3,735.00	
Rent		1,500.00	
Journal Postage		510.39	
Telephone and Telegraph		240.10	
Depreciation		220.48	
Bad Debts		65.00	
Journal Envelopes		460.20	
Office Supplies		192.17	
Miscellaneous Expense		73.60	
Water, Ice and Towel Service		98.50	
Dues and Subscriptions		106.90	
Half Tones and Etchings		86.24	
News Clipping Service		78.00	
Stationery and Printing		56.82	
Stencils and Mimeograph Supplies		41.71	
Repairs and Cleaning		37.80	
Express and Delivery Service		18.11	
Total Expense			$18,771.00
Expenses in Excess of Revenue for the year ended December 31, 1929			$ 694.62

STATEMENT OF CASH RECONCILIATION AT DECEMBER 31, 1929.

EXHIBIT No. 1

The First Citizens Trust Company

Balance as shown by Bank Statement December 31, 1929	$ 1,119.73
Less Outstanding Checks	30.23
Balance as shown by Books December 31, 1929	1,089.50
Petty Cash	10.00
Total Cash	$ 1,099.50

Annual Report of the Special Committee on Mental Hygiene

T. A. RATLIFF, Chairman ..... Cincinnati
E. J. EMERICK ..... Columbus
L. J. KARNOSH ..... Cleveland
WM. H. PRITCHARD ..... Columbus
DON K. MARTIN, Secretary ..... Columbus

A well-known authority on mental and nervous diseases has defined mental hygiene as: "An organized social movement; also, an art in the application of knowledge derived from certain basic sciences to the maintenance of individual mental health".

This statement illustrates the important and broad field of science and social welfare which the Committee on Mental Hygiene of the State Association has been studying during the past 12 months.

A survey of recent statistics gathered by this committee shows the magnitude of the problem concerning mental defectives in the United States today. One authority has briefly summarized the existing situation as follows:

"Of the 6852 institutions in the United States in 1928—general, nervous and mental, tuberculosis and other special hospitals—only 553, or approximately 8 per cent, were devoted to the care of nervous and mental patients, while the general hospitals comprised 63.6 per cent of the total number. There were approximately 11 other hospitals to every one institution for nervous and mental disorders, eight of these being general hospitals. Yet, in contrast to their comparatively small number, the institutions for nervous and mental disorders, with a total of 394,268 beds, contained more than 44 per cent of all institution beds. Of the average number of patients in institutions, more than 52 per cent were in institutions for nervous and mental disorders. The number of patients in nervous and mental institutions exceeded that in general hospitals by more than 18 per cent. The increase in the number of patients in nervous and mental institutions in the year 1927-1928 was almost twice that of the patients in general hospitals. The average percentage of beds occupied in nervous and mental institutions exceeded that in all other types of institutions.

"One out of every 71 people in the United States during 1928 was a patient in a hospital of some kind. One out of every 325 people was a patient in an institution for nervous and mental disorders, a larger proportion than for any other group of institutions. One out of every 500 people was a patient in a general hospital. One out of every 2406 people was a patient in a tuberculosis hospital. One out of every 2726 people was a patient in an 'other special' hospital."

Another authority has estimated that between 1925 and 1945 there will be an increase of 213,000 mental patients.

The National Committee on Mental Hygiene has predicted that, of the children now attending school and college, "about 960,000 will enter a hospital for mental disease at some period of their lives, if the present rates for first admissions are maintained".

In a recent report issued by the Committee on the Cost of Medical Care concerning the extent of illness and physical and mental defects prevailing in the United States, the following statement was made: "Special estimates place the number of persons in the United States who are mentally defective at over 900,000".

The cost of caring and providing at state or federal expense for the more than 300,000 mentally defective now in hospitals or institutions has been conservatively estimated as between $80,000,000 and $100,000,000 annually. The economic loss to the nation due to mental disorders has been placed at figures ranging from $200,000,000 to $500,000,000 a year. One statistician has estimated that the annual economic loss from mental disorders, including the cost of institutionalizing mental defectives in New York State alone is approximately $143,000,000.

PRESENT PROBLEMS IN OHIO

Naturally this committee has been especially interested in and has devoted much study to the numerous problems confronting Ohio in its effort

to develop and expand the state's mental hygiene program.

On January 31, 1930, there were approximately 30,000 persons classified as inmates of either state mental or state penal institutions. Slightly more than 15,000 of these were patients at the state hospitals for the insane; close to 4500 patients at the state institutions for feeble minded; nearly 2500 patients at the state hospital for epileptics, and about 10,000 inmates of the state's penal and correctional institutions.

The following tables of figures obtained from records of the State Department of Public Welfare show how the population of the state's mental hospitals has grown during the past decade, the increase from June 30, 1920 to January 31, 1930 being 5789:

STATE HOSPITALS FOR INSANE

Institution		Men	Women	Total	Increase	Pct. Increase
Athens	1920	640	640	1280		
	1930	675	687	1362	82	6.4
Cleveland		909	826	1735		
		1158	1159	2317	582	33.7
Columbus		995	917	1912		
		1169	1249	2418	506	26.5
Dayton		664	633	1297		
		661	677	1338	41	3.1
Lima		694	150	844		
		831	182	1013	169	20.0
Longview		714	768	1482		
		980	964	1944	462	31.1
Massillon		1027	835	1862		
		1381	1226	2607	745	40.0
Toledo		925	987	1912		
		1111	1037	2148	236	12.3
Total Insane		6568	5756	12,324		
		7966	7181	15,147	2823	22.9
OHIO HOSPITAL FOR EPILEPTICS						
June 30, 1920		767	767	1534		
Jan. 31, 1930		1059	924	2434	900	58.7
INSTITUTIONS FOR FEEBLE-MINDED						
June 30, 1920 (One Institution)		1205	1210	2415		
Jan. 31, 1930 (Two Institutions)		2132	2340	4481	2066	85.5

It has been estimated by some mental hygiene authorities that if the rate of increase for the next 10 years is maintained at the average rate for the past 10 years, the population of the state's mental and penal institutions in 1940 will be between 40,000 and 45,000 persons.

NEED FOR MORE INSTITUTIONS

During the past 18 years the institutional population of the state has almost doubled but only three new institutions have been erected to care for this increase. Only one new institution has been established during the past 10 years.

Many general hospitals have been forced to provide temporary quarters for mental defectives until room for them in state institutions could be provided. One statistical agency has estimated that one per cent of the entire population of Ohio, or approximately 60,000 persons, may be regarded as feeble-minded, many of whom are in need of institutional care. The present capacity of the two state hospitals for feeble-minded is less than 5000.

Some steps to remedy this inadequate housing situation have been taken. Ground has been broken for the new institution for feeble-minded at Apple Creek, Wayne County. Legal difficulties delayed actual work on the structure, but these have been settled. Early completion of the institution should be the aim of state officials. The new institution will have an initial capacity of 600 and when completed at some future date will have room for approximately 3000 inmates.

It is the hope of this committee that the state will hasten its plans for providing southwestern Ohio with a similar institution. A tract of 2000 acres near Lebanon, Warren County, formerly a part of the Otterbein Farm of the United Brethren Church has been purchased by the state as a site for a hospital for feeble-minded. The farm is being operated by patients from the Longview State Hospital until funds for erection of a new institution are authorized by the legislature.

The financial burden resulting from operation of the various state welfare institutions is growing tremendously year after year. The total appropriation voted by the Eighty-Eighth General Assembly to the State Welfare Department for operation and maintenance of the 23 state institutions within its jurisdiction was approximately $18,000,000. Only one other state department—the highway department—received a larger sum for operation and maintenance. In addition, the last Legislature also approved the expenditure of about $2,000,000 for expansion and improvement of the physical properties of a number of the state hospitals. Projects already underway, exclusive of the Apple Creek project, include: New cottage at the Gallipolis Hospital for Epileptics; new cottage at the Massillon State Hospital; power house, tuberculosis hospital, and general remodeling of the Longview State Hospital.

However, Ohio is still lagging in providing adequate quarters for its mental defectives in comparison to the ambitious building programs which have been launched in some of the other larger states. New York has started on a building program which will cost in the neighborhood of $20,000,000 and has plans for a second one which will call for the expenditure of a similar sum. New Jersey is spending $4,000,000 for new state hospitals, Michigan has an $8,000,000 program underway and has received tentative approval by the legislature of a plan calling for the expenditure of $16,000,000 more within the next few years. Pennsylvania is asking for $10,000,000 for new mental hygiene institutions and declares that $50,000,000 could be used to advantage. Illinois has started work which eventually may cost approximately $40,000,000.

PROGRAM IN OHIO

Despite the fact that Ohio is somewhat behind some of the other states in institutional facilities, it is developing a program under State Welfare Director H. H. Griswold which promises to better the mental hygiene situation in this state and provide the groundwork for material improvement within the next few years.

The advice and counsel of this committee has been solicited by Mr. Griswold on numerous occasions and it is our belief that his plans for the future are fundamentally sound and deserve the active support of the medical profession and the citizens of Ohio. His plans call for gradual expansion of the housing facilities of the state institutions for mental defective; an educational campaign on ways of preventing mental disorders, and betterment of methods of rehabilitating many of the present state wards.

It is the belief of this committee that much good already has been accomplished through recent modification and revision of the laws pertaining to commitment, parole and discharge of the insane, feeble-minded and epileptic. Further practical changes in these laws should be made when advisable and necessary.

In a recent address, Mr. Griswold summed up a program he has suggested as a way to check the swelling stream of people flowing into the state institutions as follows:

To remove the insane, psychopathic and feeble-minded from the population of the penal institutions and place them in the institutions suited to their treatment.

To increase the use of probation and parole in the hands of skilled officers to keep out of prison and institutions for mental defectives and in productive work many who are not hardened criminals or incurable mental cases.

To give those in institutions employment which will help them to earn a living when finally released.

To inaugurate a system of crime prevention and education in prevention of mental disorders, especially among the younger persons of the state.

CO-ORDINATION OF EFFORTS

Cooperation of all individuals and agencies interested in the problems of mental hygiene is considered desirable in solving the questions facing the state. Within the past year, a program for coordinating such effort has gained momentum. A temporary organization has been established and plans for financing a new state-wide group are now being worked out.

The Committee on Mental Hygiene of the State Association has been represented at the conferences relative to the formation of such a state-wide association and this committee hopes to continue its contacts and be prepared to submit definite reports and recommendations to the Council of our State Medical Association from time to time.

SOME CONCLUSIONS

Despite the dismal pictures painted at intervals in this report, there is evidence to show that substantial progress is being made in the field of mental hygiene and that there is a reasonable and hopeful indication for the future. Success will depend, however, on how well the needs of the present are met. There is a distinct challenge in the present situation to the medical profession. It must increase its interest in mental and nervous diseases and cases. It must learn more about the causes of mental disorders. It must develop existing ways and find new ways of preventing and curing mental ailments.

In summarizing its studies, your committee believes that the following factors are essential to the success of any mental hygiene program:

1. Continuous effort on the part of the medical profession to improve its knowledge of the cause, prevention and cure of mental disorders.
2. Sympathetic understanding and cooperation between agencies, groups and individuals interested in this problem.
3. Adoption of sound, practical and efficient methods of administration, and developing a program for the future.
4. Constant stimulation of public interest by dissemination of authorative and instructive information.
5. Improvement and expansion when necessary of facilities for the care, treatment and rehabilitation of mental defectives.

Annual Report of Committee on Military Affairs

H. H. SNIVELY, Chairman ..... Columbus
JOHN L. BEACH ..... Seville
BYRON BING ..... Pomeroy
DON K. MARTIN, Secretary ..... Columbus

Despite moves toward world peace, disarmament, the outlawing of war and settlement of disputes between nations through tribunals and international courts of Justice, programs of national defense still occupy a prominent place among the official functions of every government.

As one prominent army officer declared recently in discussing conflicting views on the questions of pacifism and national defense:

"Our present state of development does not yet uphold the Utopian ideal that life and wealth are perfectly safe anywhere. Preparation for national defense holds the same relation to national security that life and fire insurance do to the family, police and fire department to the city, and police power to the state."

Under the National Defense Act passed by Congress in 1920 and based on lessons learned during and after the mobilization of 1917 at the time of America's entrance into the World War, the land defense forces of the United States consists of an army composed of one part regular, two parts militia and three parts reserves, the latter units obtaining its manpower from: the Citizens' Military Training Camps, the Reserve Officers Training Corps, the Officers Reserve Corps, and the National Guard.

Naturally, in such a plan for national defense the medical profession plays a large and important part. As was demonstrated during the late war, the doctor is one of the first men to go into action and about the last out. The day is past when an army can be mobilized, trained and successfully employed in combat unless every possible measure is taken to see that every man so utilized is physically able to perform the duties assigned him; that the health of troops in mobilization centers or in combat areas are adequately protected, and that sick and wounded are given the best possible medical, surgical and hospital care.

Shortly after the close of the world war, when the War Department decided that a well-trained and well-organized Reserve Corps must be maintained in all branches of the service to give this country a potential land force adequate to meet possible future emergencies, the Ohio State Medical Association, upon the request of Surgeon General Ireland of the War Department, provided for a Military Committee to serve as a contact unit between the medical profession of Ohio and the War Department.

The duties of this committee, as suggested by the Surgeon General and approved by the House of Delegates of the State Association, are:

To establish and maintain contact with the War Department through the Surgeon General.

To promote the organization of the Reserve Corps by procurement of enrollments therein.

To receive information from the War Department in connection with the Reserve Corps and to convey the same to the State Association.

To convey the recommendations of the Association for the improvement of the organization and training of Reserve Officers.

An increase in the number of Ohioans enrolled in either the medical, dental, veterinary, sanitary or medical administrative branches of the Medical Department of the Officers Reserve Corps has taken place within the past year. At the present time, there are 1224 Ohioans holding commissions in one of these branches, as compared to 1085 a year ago, indicating that the expansion program of the Officers Reserve Corps is meeting with success as far as Ohio is concerned.

Records at Fort Hayes, the Fifth Corps Area headquarters post, show the distribution of the 1224 Ohioans enrolled in the Officers' Reserve Corps throughout the various branches and groups, as follows:

RESERVE OFFICERS OF OHIO
Active Territorial Assignment Group
(Under Corps Area Commander)

	Cols.	Lt.-Col.	Major	Captain	1st Lieuts.	2nd Lieuts.	TOTAL
Medical	11	36	97	51	299	0	494
Dental	0	1	17	20	182	0	220
Veterinary	0	0	3	7	5	34	49
Med. Adm.	0	0	0	6	5	49	60
Sanitary	0	0	1	3	2	3	9
TOTAL	11	37	118	87	493	86	832

Inactive Territorial Assignment Group
(Under Corps Area Commander)

Medical	0	5	7	20	29	0	61
Dental	0	0	1	4	29	0	34
Veterinary	0	0	1	2	0	2	5
Med. Adm.	0	0	0	1	2	4	7
Sanitary	0	0	0	0	0	0	0
TOTAL	0	5	9	27	60	6	107
TOTAL—TAG	11	42	127	114	553	92	939

Active Branch Assignment Group
(Under Chief of Branch)

Medical	4	2	9	4	21	0	40
Dental	0	2	6	1	12	0	21
Veterinary	1	0	3	4	2	2	12
Med. Adm.	0	0	0	3	2	3	8
Sanitary	0	0	7	7	2	7	23
TOTAL	5	4	25	19	39	12	104

Inactive Branch Assignment Group
(Under Chief of Branch)

Medical	1	0	5	3	3	0	12
Dental	0	0	0	0	1	0	1
Veterinary	0	0	1	2	1	0	4
Med. Adm.	0	0	0	0	2	0	2
Sanitary	0	0	1	0	0	1	2
TOTAL	1	0	7	5	7	1	21
TOTAL—TAG.	6	4	32	24	46	13	125

NATIONAL GUARD
(Dual Capacity)

	Cols.	Lt.-Col.	Major	Captain	1st Lieuts.	2nd Lieuts.	TOTAL
Medical	1	2	8	21	4	0	36
Dental	0	0	1	6	2	0	9
Veterinary	0	0	1	4	1	0	6
Med. Adm.	0	0	0	5	0	0	5
Sanitary	0	0	0	0	0	0	0
TOTAL	1	2	10	36	7	0	56

NEW APPOINTMENTS IN 1929

Medical	Dental	Veterinary	Med. Adm.	Sanitary	Total
76	56	7	16	0	155

PROMOTIONS IN 1929

Medical	Dental	Veterinary	Med. Adm.	Sanitary	Total
21	7	1	1	0	30

Under the recent General Mobilization Plan drafted by the War Department, there were in some instances a complete re-designation of units to which Medical Department Reserve Officers of Ohio are assigned with the Fifth Corps Area, which includes Ohio, Indiana, Kentucky and West Virginia.

Units that were formerly designated for mobilization from 30 to 240 days after M-Day (Mobilization Day) were transferred and placed up in the first period of mobilization and were designated for call on M-Day. This readjustment placed some 300 Medical Department Reserve Officers of the Fifth Corps Area, who were formerly scattered throughout the entire period of mobilization, which included four periods, up into the first period and made them eligible for call to active duty on Mobilization Day.

The recently approved procurement objective of the War Department for the Fifth Corps Area placed the quota under the immediate assignment jurisdiction of the Corps Surgeon at somewhere around 3000 Medical Department Reserve Officers. A large part of these officers will undoubtedly be drawn from Ohio.

In discussing the new problem for the Officers Reserve Corps, Colonel L. T. Hess, Corps Surgeon of the Fifth Corps Area, said: "Promotion

in the Reserve Corps under this new procurement objective can now be much more rapid than it was in the past as with this increase in the number of officers, a corresponding increase was made in the higher grades and a number of vacancies are being filled by officers already enrolled in the Reserve Corps."

In an effort to obtain the Reserve Officers quota assigned the Fifth Corps Area, recent graduates of the three Class A medical schools of Ohio have been circularized as well as graduates of recognized medical schools of other states included in the Fifth Corps Area. These graduates have been invited to join the Reserve Corps immediately after receiving their state license to practice medicine and through this procedure a great deal of new and desirable material is being added to the Medical Department of the Fifth Corps Area Officers Reserve Corps.

Training regulations for those enrolled in the Officers Reserve Corps call for instruction under two schemes authorized by the federal government, namely: summer training camp and correspondence courses.

Your committee is of the opinion that greater interest should be shown by the medical profession in Ohio in the expansion program of the Officers Reserve Corps. Some physicians have objected to the training offered by the Reserve Corps on the grounds that a medical man does not need it. While it is probably true that a certain amount of medical military work can be done without special training, it is also a fact that there is a great amount of special work needed to make the medical department of any fighting force fit to handle its problems efficiently. Problems of selecting men, training them, feeding them, sheltering them, clothing them, transporting them and disciplining them in case of war are faced by the Medical Department, the same as all other branches of the service. It is essential that members of the Medical Department have an understanding of the basic principles which make for an efficient officer and soldier. It is important that every member of the Medical Department know something of the organization of the Army that he may play his part and that he know something of the other departments so he can properly function as part of the team.

The Ohio National Guard is well organized. Its training programs and schedules are very carefully worked out for more than a year in advance. Its medical department consists of the 112th medical regiment, completely organized except for one collecting company. The infantry regiments and the artillery regiments each have medical detachments. Such a set-up offers an excellent opportunity for practical instruction with troops for medical officers commissioned in the Guard. There is no reason why medical officers in the Reserve should not avail themselves of this opportunity for practical training with troops. The National Guard invites the reserve officers to avail themselves of such instruction, to the extent that these officers may be placed with the various units.

A few years ago the medical officers of a reserve medical regiment of Indiana participated in the field training service with the 112th medical regiment at Camp Perry, Ohio, with pleasure and profit to all concerned. The value of field service with troops cannot be over-estimated.

The medical profession of Ohio may well be proud of the prominent role which it played in the last great conflict. It would be expected to serve just as efficiently in case of another war, so it should be prepared to meet that challenge.

Your committee urges every Ohio physician eligible for the Reserve Corps to interest himself in this national defense program. More specific information than is given in this report may be obtained from the Surgeon's Office, Fifth Corps Area, Fort Hayes, Columbus. As pointed out previously, the doctor is among the very first to be called to the colors. He must be prepared to perform well the duties assigned him.

Annual Report of the Councilors

The Council of the Ohio State Medical Association, the executive and administrative body of our State Association, under our constitution, has considered numerous questions affecting medical practice, public health, medical organization and the social-economic and professional life of Ohio physicians during the 12 months which have lapsed since the last annual meeting.

Charged with the responsibility of seeing that the activities authorized by the House of Delegates of our State Association are carried out and that the fundamental policies established by the State Association are adhered to, the Council has endeavored during the past year to meet each question or problem from an unbiased and sympathetic point of view. It has made an effort to render a fair decision and practical solution in each instance after careful consideration and thorough study of each separate question.

The Council has tried to view all problems from the standpoint of the average, hard-working and conscientious practicing physician. It has endeavored to render decisions it believes were for the best interest of the great majority of the medical profession and of benefit to the public.

Some idea as to the numerous and varied activities of the Council during the past 12 months may be obtained by studying the minutes of its meetings published from time to time in *The Journal*. Issues containing these minutes con-

stitute a part of this report and are as follows:

June, 1929	Page 481
July, 1929	Page 568
October, 1929	Page 891
January, 1930	Page 47
April, 1930	Page 337

Special attention of the members of the State Association is called to the action of Council on the Foundation Fund question. This question, which has been pending before the House of Delegates and the Council for several years, was seriously discussed and given careful consideration several times during the past year by the Council, and reports of the original Foundation Fund Committee and the holdover House of Delegates reference committee heard and studied. In accordance with the action of the House of Delegates at the 1929 annual meeting (page 478 of the June, 1929, issue of *The Journal*) in which the Foundation Fund question was referred by the House of Delegates to the Council for consideration and action, the Council at its December, 1929, meeting, took definite action on the matter, as summarized in the minutes of that meeting (page 48 of the January, 1930, issue of *The Journal*).

This action, in the form of a motion, instructed the secretary of Council to transmit to the House of Delegates at the next Annual Meeting the opinion of the Council that the Foundation Fund proposal for the State Association "is not practical or desirable", which means therefore that any further action on the question must originate in the House of Delegates.

During the past year, each Councilor has endeavored to maintain close contact with each component academy and county medical society in his district. He has attempted to obtain knowledge of the conditions and activities of each society and he has tried to be of assistance whenever the opportunity presented itself. Efforts have been made by individual Councilors to visit each society in his district at least once a year; to assist in arranging programs for regular and special meetings; to discuss and confer on mutual and local questions and problems; to aid county officers in stimulating growth in membership, and to serve as a medium or clearing house for business between county societies and the State Association. All the Councilors are especially anxious and willing to serve the county societies and physicians in their districts and urge that the splendid cooperation which has been established between Councilors and their respective constituents be maintained during the coming year.

The Council is saddened to record the death during the past year, of one of its members, Dr. Jennings M. King, of Wellsville, Councilor of the Seventh District. Dr. King was respected and loved by all who knew him. His deep interest in the affairs of the State Association, in the advancement of scientific medicine and in the welfare of humanity, and his years of faithful service as a member of Council played a definite part in the progress which has been made by organized medicine in this state. Dr. King's professional skill and his outstanding characteristics as a noble and valuable citizen won for him enduring esteem among his colleagues and the love of those whom he served.

MEMBERSHIP DATA

First District

John A. Caldwell, M.D., Cincinnati, Councilor

County	Paid Membership for 1929	Paid Membership to April 15 1930
Adams	14	12
Brown	11	10
Butler	76	79
Clermont	20	20
Clinton	23	24
Fayette	20	19
Hamilton	583	559
Highland	10	18
Warren	22	19
	788	760

Second District

D. C. Houser, M.D., Urbana, Councilor

Champaign	23	23
Clark	71	69
Darke	44	38
Greene	35	33
Miami	49	45
Montgomery	249	231
Preble	17	17
Shelby	21	21
	509	477

Third District

O. P. Plotz, M.D., Findlay, Councilor

Allen	86	67
Auglaize	24	26
Hancock	39	38
Hardin	25	19
Logan	32	29
Marion	50	47
Mercer	17	15
Seneca	31	31
Van Wert	19	21
Wyandot	8	11
	331	304

Fourth District

D. J. Slosser, M.D., Defiance, Councilor

Defiance	19	17
Fulton	19	19
Henry	17	15
Lucas	342	302
Ottawa	16	13
Paulding	10	6
Putnam	24	22
Sandusky	41	41
Williams	20	22
Wood	40	36
	548	493

Fifth District

C. L. Cummer, M.D., Cleveland, Councilor

Ashtabula	41	41
Cuyahoga	982	896

Erie	34	31
Geauga	11	11
Huron	21	18
Lake	22	18
Lorain	91	90
Medina	22	21
Trumbull	59	54
	1283	1180

Sixth District

D. W. Stevenson, M.D., Akron, Councilor

Ashland	18	21
Holmes	7	6
Mahoning	162	161
Portage	24	24
Richland	62	58
Stark	179	173
Summit	269	261
Wayne	40	35
	761	739

Seventh District

E. B. Shanley, M.D., New Philadelphia, Councilor

Belmont	59	58
Carroll (with Stark County)		
Columbiana	65	54
Coshocton	19	22
Harrison	11	10
Jefferson	50	50
Monroe	10	10
Tuscarawas	51	48
	265	252

Eighth District

E. R. Brush, M.D., Zanesville, Councilor

Athens	39	33
Fairfield	37	31
Guernsey	27	26
Licking	48	45
Morgan	7	7
Muskingum	54	46
Noble	4	2
Perry	22	22
Washington	36	32
	274	244

Ninth District

I. P. Seiler, M.D., Piketon, Councilor

Gallia	26	21
Hocking	10	11
Jackson	15	15
Lawrence	18	19
Meigs	12	10
Pike	5	6
Scioto	78	75
Vinton	5	4
	169	161

Tenth District

S. J. Goodman, M.D., Columbus, Councilor

Crawford	28	24
Delaware	22	19
Franklin	419	388
Knox	28	25
Madison	12	12
Morrow	9	7
Pickaway	21	19
Ross	40	36
Union	21	20
	600	550
Grand Total	5528	5160

The Annual Dinner

One of the features of the Eighty-Fourth Annual Meeting of the Ohio State Medical Association, May 13, 14 and 15, at the Neil House, Columbus, will be the annual banquet to be held on Tuesday evening, May 13, at 7 p. m., in the Main Ball Room.

This informal dinner, for many years a feature of the Annual Meeting program and revived after being omitted for several years, will be combined with the Second General Session at which the annual addresses of the President, Dr. A. H. Freiberg, Cincinnati, and President-elect, Dr. C. W. Waggoner, Toledo, will be delivered. Several other items of entertainment also are being arranged by the Entertainment Committee of the Columbus Academy of Medicine, consisting of Dr. Joseph Price, chairman, Dr. Roy E. Krigbaum, Dr. John W. Means, Dr. C. W. McGavran and Dr. L. M. Murphy.

Tickets for the dinner are $2.00 each and may be obtained early on the opening day of the Annual Meeting at the Registration Headquarters, located on the Mezzanine Floor.

Since definite arrangements must be made with the Neil House and definite preparation under way for the large number who may be expected to attend this dinner, it is important and necessary that all members who expect to attend the dinner, purchase their dinner tickets at the time they register for the meeting and immediately upon their arrival, if possible.

To insure definitely that you will be able to secure tickets for this occasion, you may mail a check (not cash) made out to the Ohio State Medical Association, 131 East State Street, Columbus, Ohio, *before* May 8. A receipt will be mailed to you which *must* be exchanged by you at the registration headquarters for your ticket (or tickets) *before* 5 P. M. on Tuesday, May 13.

As the final guarantee of the number at the dinner must be made to the Neil House management by 2 p. m., on Tuesday, May 13, those who do not expect to arrive in Columbus and register by that time, and who have not ordered and paid for tickets in advance, should make arrangements with one of their colleagues, among the expected early arrivals, to purchase tickets for them *before* 2 p. m. on that date.

All members who can possibly arrange to do so should attend this dinner get-together as it will offer all a fine opportunity to renew old friendships and rally around with their colleagues and classmates.

Clinics at Columbus Hospitals a Special Added Attraction

Arrangements are being completed by the Clinic Committee of the Columbus Academy of Medicine for the medical and surgical clinics at a number of the Columbus hospitals on Monday morning and afternoon, May 12, and Tuesday morning only, May 13, as an important feature in connection with the 84th Annual Meeting of the Ohio State Medical Association, May 13, 14 and 15. Clinics will be held practically throughout the entire day on Monday, and for those who do not wish to attend and who are not expected to participate in the House of Delegates proceedings on Tuesday morning, the hospital clinics on that day also will be a special attraction.

The details and schedules for the clinics are being arranged by the clinic committee of the Columbus Academy of Medicine consisting of Drs. Fred Fletcher, Chairman; G. Wayne Brehm, John Edwin Brown, Ivor G. Clark, Andre Crotti, E. J. Gordon, I. B. Harris, Joseph Price, J. M. Rector, A. M. Steinfeld, and Wells Teachnor, Jr.

Detailed schedules for the clinics with a listing of the types of cases, names of physicians and surgeons participating, and the locations of the various hospital will be completed in time for printing and distribution at the registration desks in the various Columbus hotels, so that early arrivals may secure them on Sunday evening, May 11, and early on Monday morning, May 12.

The preliminary schedule submitted by the Clinic Committee of the hospitals and physicians participating follows:

GRANT HOSPITAL
Surgical and Medical Clinics

Monday—8:00 a. m. to 12:30 p. m.; and 2:00 p. m. to 4:00 p. m.

Tuesday—8 a. m. to 12 noon.

Drs. Baldwin, Brown, Benson, Drury, Dunn, Fletcher, Harris, Hoffhines, McCampbell, McGavran, Wilson and Silbernagle.

MERCY HOSPITAL

Clinics Monday from 10:00 a. m. to 3:00 p. m.; and Tuesday morning.

Dr. Joseph Price and members of Staff.

ST. FRANCIS HOSPITAL
Surgical and Medical Clinics

Monday 8:00 a. m. to 12:30 p. m. 2:00 to 4:00 p. m.; and Tuesday morning, 8 a. m. to noon.

Drs. Bigelow, Fulton, Harris, Hopkins, Masters, Shawaker, Van Buskirk and Zartman.

MT. CARMEL HOSPITAL
Surgical and Special Clinics

Monday 8:00 a. m. to 12:30 p. m. Tuesday morning 8 a. m. to noon.

Drs. Beck, Beatty, Bratton, Hamilton, Kirkendall, Stedem and Yoakem.

UNIVERSITY HOSPITAL
Surgical and Medical Clinics

Monday 9:00 a. m. to 12:30 a. m. 2:00 to 4:00 p. m. Tuesday 9 a. m. to noon.

Drs. Beatty, Charlton, Dodd, Fletcher, Frost, Gordon, Means, Nelson, Reel and Taylor.

WHITE CROSS HOSPITAL

Data not furnished at time of going to press.

Good News for Golfers—Annual Tournament May 12

A record-breaking entry list for the Tenth Annual Tournament of the Ohio State Medical Golfers' Association to be held at the Columbus Country Club, Monday, May 12, the day preceding the opening of the Eighty-Fourth Annual Meeting of the Ohio State Medical Association at the Neil House, Columbus, is predicted by Dr. Carl A. Hyer, Columbus, president of the golfers' association.

If weather conditions are satisfactory, between 200 and 250 physicians from all parts of the state are expected to tee off in the meet which has become one of the unofficial but interesting and important features of the annual meeting of the State Association.

The Columbus committee on arrangements, appointed by Dr. Hyer, has been busy for several weeks assembling a list of approximately 35 attractive prizes and completing details for the big event. The local committee is composed of Dr. J. J. Coons, chairman; Dr. F. C. Haney, vice-chairman, Dr. W. D. Inglis, Dr. J. H. Warren, Dr. George C. Schaeffer and Dr. P. L. Cordray.

Rules of play for the tournament will be the same as last year. Prize cup winners will play in foursomes designated by the committee. Two score cards must be turned in for each foursome and all putts must be holed out. Winter rules will prevail in the fairway.

A majority of the past-champions of the golfers' association are planning to be on hand in an effort to dethrone Dr. J. L. McEvitt, Akron, who copped the championship last year at Cleveland.

Others who have won the championship are: Dr. W. D. Inglis, Columbus, '21; Dr. E. E. Gaver, Columbus, '22 and '23; Dr. W. H. Fisher, Toledo, '24; Dr. R. R. Wilkinson, Cincinnati, '25; Dr. T. F. Heatley, Toledo, '26; Dr. W. L. Furste, Cincinnati, '27 and '28.

A program of special entertainment has been arranged for the annual banquet which will be held at the clubhouse in the evening when the prizes will be awarded.

Every male member of the Ohio State Medical Association is eligible to membership in the golfers' association. Those who have not paid their annual dues to the golfers' association should do so at once to make them eligible to compete in this year's tournament. An initiation

fee of $2.00 will be charged new members. Checks should be sent as soon as possible to Dr. J. B. Morgan, secretary-treasurer of the golfers' association, 1301 Medical Arts Building, Cleveland.

The Columbus committee has arranged for transportation for visiting golfers who do not drive to Columbus. Machines, provided by Columbus physicians, will visit the various Columbus hotels on the morning of the tournament to pick up golfers who have no other way to get to the course. The first foursome is scheduled to tee off as near 7:30 a. m. as possible.

Every member of the State Association who plays the game is urged by the officers and local committeemen to take part in this year's meet, with its unusually large prize list and which will be played over one of the finest courses in the state.

State Medical Board Proceedings

Dates for the June examinations were selected at the April meeting of the State Medical Board held in Columbus, as June 9, 10, 11 and 12, the written examinations at Memorial Hall, Columbus, and the practical examinations at St. Francis Hospital.

During the formal session of the Board meeting, the license of Abraham M. Goldstandt, Columbus, was revoked on charges of unprofessional conduct and the license of W. R. Scott, Dayton, was suspended for 30 days on similar charges.

The attention of the Board was called to correspondence between the secretary of the Board, Dr. H. M. Platter, and the *Journal of the American Medical Association*, regarding the severance of reciprocity relations by Ohio with the District of Columbia.

Members of the Board informally discussed a letter appearing in the February 15 issue of the *A.M.A. Journal* over the signature of Dr. W. C. Fowler, Washington, D. C., secretary-treasurer of the District of Columbia Commission on Licensure, in which Dr. Fowler said:

"The Journal, January 18, page 193, is only partly correct when it says the applicants for the issuance of licenses to practice medicine in the District of Columbia, asking exemption from the examination because of licenses issued by the State Medical Board of Ohio after examination, are required to pass an examination before the District of Columbia Basic Science Board. Such examinations are made necessary now only by the absence of evidence showing the examinations in anatomy, physiology, chemistry, bacteriology and pathology given by the Ohio State Medical Board of Medical Examiners are as rigid as the corresponding examinations given by the District of Columbia Basic Science Board. When the State Medical Board of Ohio furnishes satisfactory evidence to show that its examinations are as rigid as the basic science examinations in the District of Columbia, the basic science board of the district can exempt Ohio licentiates from the basic science examinations. The basic science section of the Healing Arts Practice Act, District of Columbia, approved February 27, 1929, contains liberal provisions for reciprocity, not only with any state basic science board but also with any state medical examining board. The basic science provisions of the district constitute the first line of defense of the public against ignorance and quackery in the healing arts, and they have already demonstrated their value."

Dr. Platter's answer to Dr. Fowler's letter also was discussed by the Board, the members of which expressed the opinion that it accurately recorded the action of the Board in severing reciprocity with the District of Columbia and clearly outlined the policy of the Board concerning reciprocity relations with all states.

Dr. Platter in his letter, published in the March 15 issue of the *A.M.A. Journal*, said in part:

"For the first time the Ohio board learns that the District of Columbia Basic Science Board is not satisfied with the examinations given by Ohio in the subjects of anatomy, physiology, chemistry, bacteriology and pathology. No request has been made to this office to furnish the Basic Science Board with the questions given in Ohio. The District of Columbia could easily have obtained this information directly or could have learned from the American Medical Association offices that the Ohio examination occupies a period of three days —two days of written and one of practical, oral and bedside work, and further that no applicant is admitted to the Ohio examinations who does not possess a diploma of graduation from a medical school holding membership in the American Medical College Association.

"This seems to be the crux of the whole situation: Ohio holds to the opinion that an individual holding an Ohio license based on satisfactory credentials must not be required to take examination in the basic science for the third time before he is accorded reciprocity with another state. Ohio does not believe that first or second line of defense should be interposed against such applicants but holds to the belief that the basic science requirements should be exacted of all applicants who do not submit evidence of qualification which would have permitted them to graduate from a school holding membership in the American Medical College Association."

Patent medicines are being backed off the stage by patent foods, advertised to make the human race thin, fat, beautiful or full of "it", according to Dr. W. McKim Marriott, St. Louis, who spoke before the annual Congress of Medical Education and Hospitals of the American Medical Association, held recently in Chicago.

Deaths in Ohio

John W. Baldwin, M.D., Port Clinton; Toledo Medical College, 1913; aged 45; died March 25 from the effects of poison taken with suicidal intent. Dr. Baldwin's aged father, who resided with him, died from heart failure an hour after being informed of the tragedy. Dr. Baldwin had practiced in Port Clinton for three years. His widow and one son survive him.

Clarence J. Broeman, M.D., Cincinnati; Miami Medical College, Cincinnati, 1906; aged 46; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 3 of heart disease. Dr. Broeman served his internship at the Skin and Cancer Hospital, New York, following which he spent some time in South America. In 1909 he opened offices in Cincinnati, and ten years ago established a private hospital. He was a member of the faculty of the University of Cincinnati College of Medicine and assistant director of dermatology at General Hospital, and visiting dermatologist at St. Mary Hospital. Surviving him are his widow, his father and two brothers.

Charles A. Gallagher, M.D., Marietta; Rush Medical College, University of Chicago, 1882; aged 70; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 4 of heart disease. Dr. Gallagher practiced in Michigan before locating in Marietta 36 years ago.

Thomas Gibson Farr, M.D., Waynesville; Starling Medical College, 1878; aged 92; former member of the Ohio State Medical Association and honorary member of the Clark County Medical Society; died March 30 at McClellan Hospital, Xenia, where he had been a patient since May, 1929. Dr. Farr practiced in Springfield and Selma before locating in South Charleston, where he practiced for more than 40 years. Following his retirement 12 years ago, he lived at Waynesville. He is survived by one son.

William J. Green, M.D., Columbus; Columbus Medical College, 1881; aged 78; former member of the Ohio State Medical Association; died April 1. Dr. Green had practiced in Columbus more than 50 years. He is survived by one son and one daughter.

Clinton J. Hays, M.D., Akron; Medical College of Ohio, 1885; aged 70; former member of the Ohio State Medical Association; died March 19. He retired four years ago after 35 years of active practice in Akron. Surviving him are his widow and one son.

Robert C. Jones, M.D., Medical College of Ohio, Cincinnati, 1883; aged 68; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 29, following a long illness. Dr. Jones was field examiner and medical director of the Western and Southern Insurance Company for the last 20 years.

Frank Carter Larimore, M.D., Mt. Vernon; Bellevue Hospital Medical College, New York, 1869; aged 84; life member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 18, following a few days illness. He became ill on his return from Milwaukee, where he spent his 84th birthday with a daughter. Dr. Larimore had practiced in Mt. Vernon and Knox County for over 50 years, before his retirement from active practice. He held the office of president of the Ohio State Medical Association in 1896-1897, and for many years served as delegate from Knox County to the annual meetings of the State Association. Dr. Larimore was a Civil War veteran.

Edward G. McCormick, M.D., Waynesburg; Columbus Medical College, 1879; aged 74; died March 23 of heart disease. Dr. McCormick had practiced in Waynesburg for 51 years. He is survived by his widow, one son and one daughter.

Harvey M. Samson, M.D., Lancaster; Baltimore Medical College, Baltimore, Maryland, 1893; aged 61; died March 14. Dr. Samson practiced in Waverly before locating in Lancaster in 1898. He retired from practice in 1913. Surviving him are his widow, two sons, two brothers and a sister.

C. Gustave E. Speidel, M.D., Cincinnati; Medical College of Ohio, Cincinnati, 1886; aged 70; member of the Ohio State Medical Association and Fellow of the American Medical Association; died March 9 of cerebral hemorrhage. Following graduation, he spent a year in Germany doing post graduate work. On his return he engaged in active practice, and also served on the faculty of the Ohio Medical College. One sister survives him.

James M. Van Fossan, East Palestine; Columbus Medical College, 1883; aged 74; died March 30. Dr. Van Fossan practiced for two years at Calcutta, before locating in East Palestine. He had served as county coroner of Columbiana county for 14 years. One daughter survives him.

William S. Walker, M.D., Toledo; Pulte Medical College, Cincinnati, 1897; aged 68; died March 29 of apoplexy. Dr. Walker had practiced in Toledo for 40 years. Surviving him are his widow, and two sons.

John W. Ward, M.D., Archers Fork; College of Physicians and Surgeons, Baltimore, 1890; aged 74; former member of the Ohio State Medical Association; died March 19 of pneumonia. Dr. Ward was born in Archers Fork, and practiced in his home community until his retirement a few years ago. He is survived by four sons, four daughters and one sister.

NEWS NOTES of OHIO

Cleveland—A resolution commemorating the late Dr. Carl A. Hamann, former dean of the School of Medicine, Western Reserve University, has been adopted by the faculty of the medical school. Members of the committee which drafted the resolution were Dr. John P. Sawyer, Dr. William E. Bruner, Dr. T. Wingate Todd and Dr. Frederick C. Waite.

Toledo—Dr. J. W. Hull is vacationing in Florida.

Toledo—Dr. J. F. Beerman is on a pleasure trip to Arizona.

Cleveland—Dr. Howard Dittrick is recovering from a knee injury.

Cleveland—Dr. Howard T. Karsner was a member of a special committee of the National Research Committee which has issued a booklet discussing the various state laws relative to the legal status of a dead body.

Cleveland—The marriage of Dr. A. T. Bunts and Miss Mary Corbin, of New Haven, Conn., has been announced.

Cleveland—Dr. and Mrs. Milton B. Cohen have returned from a month's stay in Sarasota, Florida.

Cleveland—Dr. James J. Joelson and Miss Frances Casement, of Painesville, were married in Syracuse, N. Y.

Cleveland—The marriage of Dr. Marion Douglass and Mrs. Amy Carpenter Black, of Mansfield, at Miami, Florida, has been announced.

Cleveland—Dr. Henry J. Gerstenberger was a member of the faculty of the post-graduate course in pediatrics and obstetrics given recently by the Universities of Oklahoma and Kansas.

Cleveland—Dr. M. E. Gans has gone to Europe where he will devote five months to graduate work in ophthalmology in Vienna and Budapest.

Ravenna—Dr. S. U. Sivon recently underwent an operation at the Lakeside Hospital, Cleveland.

Akron—Dr. J. N. Weller recently addressed the Cuyahoga Falls Kiwanis Club.

Cleveland—Cuyahoga County's new jail physician is Dr. Charles H. McFarland. He succeeds the late Dr. A. E. McClure.

Mt. Vernon—The insanities of famous men were discussed by Dr. Louis Karnosh, Cleveland, before a luncheon meeting of the Chamber of Commerce.

Wellston—Dr. George W. Darling is recovering from a critical illness.

Ravenna—Improvement has been noticed in the condition of Dr. B. H. Nichols, who has been seriously ill with influenza.

Kent—Dr. and Mrs. W. B. Andrews left April 4th for six weeks' visit in California.

Piketon—Dr. I. P. Seiler, councilor of the Ninth District of the Ohio State Medical Association, is recovering from a severe attack of influenza.

Springfield—Arrangements have been made by the Clark County Medical Society and the board of trustees of the Warder Public Library for a medical reference room in the library. Books and magazines owned by the medical society and its members, as well as local dentists, will be placed in the reference room for use of members of both professions.

Tiffin—Dr. and Mrs. J. J. Heaton gave a dinner recently honoring Dr. Heaton's father, Dr. Charles A. Heaton of McCutchenville, who has completed a half century of medical practice.

Dayton—Dr. George Goodhue has recovered sufficiently from an attack of pneumonia to leave for Miami, Florida.

Akron—Dr. George W. Crile, Cleveland, addressed the local Lions Club recently.

Lisbon—Dr. Seward Harris has been reappointed county jail physician.

Cleveland—Dr. Clarence H. Kuhlman is taking post-graduate work in New York City.

St. Marys—Dr. Harry S. Noble has returned from a two weeks visit in New York City.

Columbus—A number of paintings, the work of Dr. Edward A. Harper, were on exhibition recently in a local theater. Dr. Harper has completed 72 canvasses within the past two years. An injury sustained several years ago forced him to curtail a part of his practice.

Delaware—Dr. Maynard S. Cherrington has sailed for Europe where he will take post-graduate work at Vienna.

Dover—Dr. Max Shaweker has received notice from the War Department of his appointment to the rank of lieutenant commander and surgeon in the naval reserve corps. He was promoted from lieutenant and assistant surgeon.

Toledo—Drs. William A. Neill, Kinsley Renshaw, Carl Bayha, James Magoun, Arthur P. R. James and Harland F. Howe, who operate the Toledo Clinic, have purchased an old residence and are remodeling it as new quarters for the clinic.

Bellaire—Dr. Charles Wassman, a resident of Bellaire for the past three years, has moved to Philadelphia to take up special diagnostic work.

Cleveland—Dr. Roger Griswold Perkins, head of the Department of Bacteriology and Hygiene, School of Medicine, Western Reserve University, has resigned in order to devote more time to special studies in which he is interested. He joined

the faculty at Western Reserve in 1898 as a demonstrator in pathology. During the World War, Dr. Perkins served with the Red Cross in Roumania and as scientific attache to the American Embassy in Paris.

Cleveland—Friends of Dr. James Craven Wood, who has completed 51 years of medical practice, honored him with a dinner recently at the University Club.

Cleveland—Members of the Association of Hospital Social Workers were addressed recently by Dr. Alan Finlayson who has just returned from a trip abroad.

Columbus—Dr. John H. Mitchell has been chosen resident pathologist and laboratory assistant at White Cross Hospital, succeeding Dr. Roswell S. Fidler, who has accepted a position as director of the laboratory of the Springfield City Hospital.

Chillicothe—Dr. J. R. Motter was honored recently by a dinner on his seventy-seventh birthday. Among the guests were Drs. O. P. Tatman, Frank T. Marr and J. M. Hanley of Chillicothe.

Akron—Among Akron physicians who have volunteered to make examinations of candidates for the Citizens' Military Training Camps are: Drs. M. D. Ailes, H. R. Baremore, Daniel W. Davis, Sidney J. Havre, David E. Hawthorne, T. J. Hollingsworth, Howard W. Hottenstein, Charles S. Lehner, D. F. Mathias, M. C. Morgan, Harvey H. Musser, Charles R. Newton, F. C. Potter, M. C. Tuholske and C. E. Updegraff.

Dayton—Dr. T. C. Smith, clinical director at the Dayton State Hospital, has resigned to accept a position at the Battle Creek Sanitarium, Battle Creek, Michigan.

Cleveland—The Cleveland Academy of Medicine has awarded an honorary membership in the academy to Dr. George Neil Stewart, director of the H. K. Cushing laboratory of experimental medicine of Western Reserve University, for his internationally recognized experiments.

Marion—Dr. August Rhu and his son, Dr. Herman S. Rhu, were badly injured in an automobile accident north of Marion. Dr. August Rhu had a leg broken and several rib injuries. Dr. Herman Rhu sustained dislocated hip and a wrenched back.

Columbus—Dr. C. C. Ross has been elected chairman of the general practitioners of Columbus, composing the medical section of the Columbus Academy of Medicine. Other officers are: Secretary, Dr. George T. Harding and members of the executive committee, Dr. John Rauschkolb, Dr. G. B. Nessley and Dr. W. H. Cleveland.

Tiffin—Dr. Edwards H. Porter and family are enjoying a three months' Mediterranean cruise. Dr. Porter reports some interesting experiences in the Government eye hospitals in Egypt.

Athens—Dr. T. A. Copeland and family sailed early in April for Berlin, where Dr. Copeland will spend three months at the University of Berlin, doing special work in eye, ear, nose and throat.

Tiffin—Dr. R. F. Machamer was appointed as a member of the health board, to succeed Dr. H. L. Wenner, resigned.

Toledo—Dr. Norris W. Gillette was elected president of the Northern Tri-State Medical Association at its 57th annual meeting in Fort Wayne, Indiana, April 9. Other officers elected were Dr. D. J. Slosser, Defiance, vice president; Dr. E. D. Pedlow, Lima, secretary, and Dr. Goit Larson, Laporte, Indiana, treasurer. Ann Arbor, Michigan, was chosen as the 1931 convention city.

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PROMPT AND FULL REPORT

PUBLIC HEALTH NOTES

—Nursing Council of the Cincinnati Public Health Federation will observe the birthday of Florence Nightingale, May 12, with a public meeting at the Emery Auditorium. There will be a musical program and an address by Miss Mary Roberts, editor of the *American Journal of Nursing*, New York City.

—A new waiting room card emphasizing the importance of immunization of children against diphtheria has been distributed to members of the medical profession by the Cincinnati Board of Health. The board in a letter accompanying the card states that during 1929 approximately 35,000 children under 10 years of age were immunized, but that there are still 25,000 Cincinnati children in the unprotected group.

—There was a marked increase in the number of cases of occupational diseases in Ohio during 1929, as compared to preceding years, according to figures compiled by the Division of Industrial Hygiene, State Department of Health. During 1929, reports of occupational diseases made to the division totaled 1401, compared to 1118 in 1928, an increase of 25 per cent. Part of the increase was due to the addition of tenosynovitis (37 cases) and prepatellar bursitis (13 cases) to the compensable occupational disease schedule, it was pointed out. Another reason for the increase was due to an epidemic of caisson disease (62 cases) which occurred during construction of a tunnel in Columbus. Since May, 1919, when the division was established, to the close of 1929, it has received 10,478 reports of occupational diseases.

—Western Reserve University is offering a summer program in public health nursing, classes to start on Monday, June 3, and end, Friday, August 1. The course is designed to give a basic knowledge of social work and to relate the work of the public health nurse to that of other social agencies with an understanding of their common methods and purposes. The program is part of the nine months course offered by the School of Applied Social Sciences. Nurses completing satisfactorily three summers of theoretical work and one semester of practical field work are eligible for certificates in public health nursing.

—Arrangements have been made by the Lorain County Health Department whereby Western Reserve University may make use of Lorain County as a training field for nurses in rural public health work.

—The medical committee of the Cincinnati Anti-Tuberculosis League is composed of Drs. H. Kennon Dunham, chairman; Samuel Iglauer, C. A. Neal, William H. Peters, and J. L. Tuechter.

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—A new city health code has been adopted by the Toledo City Council. It provides for municipal licensing of restaurants and for the regulation of food handlers, manufacturers and distributors of food, as well as beauty parlors and barber shops.

—The Marion city and county health boards have been merged with Dr. N. Sifritt, present county health commissioner, in charge.

—Results of an intensive study into the effects of poison gas on the lungs will shortly be made public by the U. S. Veterans Bureau, Dr. P. B. Matz, Washington, has announced. During the World War more than 70,000 American soldiers were gassed and of this number 1421, or two per cent died, it was stated. The reason there were not more casualties was because by the time America entered the war devices had been invented which were fairly effective against gas, it is pointed out.

—Affliction of 11 workers of the U. S. Public Health Service laboratory with psittacosis (parrot fever) necessitated temporary abandonment of the laboratory until it could be fumigated, according to a Washington announcement.

—Contracts for the construction of 30 buildings at the new Pilgrim Mental Hygiene Hospital, Pine Aire Station, Long Island, totaling $10,297,128, have been let. It was the largest single construction award ever made by the State of New York.

—Dr. William D. Tillson, formerly of Windsor, Virginia, has been appointed chief of the Bureau of Tuberculosis, State Department of Health.

—Dr. William H. Peters, Cincinnati health commissioner, has suggested to officials of the University of Cincinnati that they make vaccination against smallpox a prerequisite to entrance at the university.

—A resolution to give the City of Lima a part of the grounds of the District Tuberculosis Hospital as a site for the new basic $970,000 sewage disposal plant has been adopted by the board of trustees of the hospital. The move was made in an effort to acquire suitable means of disposal of sewage from the institution.

—The city commission of Piqua has adopted an ordinance for compulsory medical examination and certification of all persons handling food in hotels, restaurants, and other public places.

—The tenth annual Ohio Water Purification Conference will be held in Columbus, October 14-15. The annual Sewage Treatment Conference will be held in Dayton, October 16-17.

—The State Department of Health has sent letters to all general district health commissioners asking for an immediate survey of all certified semi-public water supplies under their jurisdiction and that immediate reports be made on the sanitary condition of these supplies and the status of their development.

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News Notes From County Societies and Academies

First District

ACADEMY OF MEDICINE OF CINCINNATI

(Edward King, M.D., Secretary)

March 17—Regular meeting of the Academy at the Chamber of Commerce, Cincinnati. Program: "Varieties of Cerebral Hemorrhage", with lantern slides, by Dr. A. R. Vonderahe.

March 24—Case Reports: "Trichiniasis—Early Death from Respiratory Failure", by Drs. Pearl Zeek and Louis G. Heyn; "Interstitial Keratitis of Malignant Syphilis Treated with Mercuric Chlorid Lethally", by Dr. John Henry Wilms; "Marble Bone Disease in a Family of Five", by Dr. Cecil Striker; "Diaphramagmatic Hernia", by Dr. Samuel Brown; "Rheumatic Endocarditis (with all four valves involved) Confirmed by Post-mortem", by Dr. Bernard A. Schwartz.

March 31—Joint meeting with the Cincinnati Dental Society. "The Function of the Family Physician in the Prevention of Dental Caries and Pyorrhea Aleolaris, and the Function of the Dentist in Preventing Metastatic Infection from Primary Sources of Infection in the Mouth", by Dr. Lewellys F. Barker, of Baltimore, Maryland.

April 7—Program: "Deficiencies of the Anal Sphincter", by Dr. C. Ross Deeds; Report of Public Health Committee on Periodic Health Examinations.

April 14—Program: "Treatment of Liver Diseases", by Dr. Charles A. Elliott, Professor of Medicine, Northwestern University, Chicago.

April 21—Program: "The Necessity for Complete Investigation in Cases of Sterility", by Dr. Samuel R. Meaker, Boston.

April 28—Program: "Traumatic Surgery", by Dr. Louis Feid, Jr.—Bulletin.

Butler County Medical Society held its regular meeting at Fort Hamilton hospital, Hamilton on Wednesday, March 12. At the business session, resolutions were adopted in opposition to two bills pending in Congress to further restrict physicians in their use of narcotic drugs. An interesting scientific program included a paper on "Ileus", presented by Dr. H. M. Lowell, with discussion opened by Drs. E. O. Bauer and Dan Skinner. "Treatment and Prevention of Scarlet Fever in Children" was the subject of a paper presented by Dr. H. N. Ward, with discussion by Drs. H. A. Moore and C. A. Spitler. The meeting was concluded with a dinner at 5:30.—News Clipping.

Fayette County Medical Society met at the Y.M.C.A., Washington C. H., on Thursday, March 6 for its regular monthly session. The visiting speaker was Dr. I. B. Harris of Columbus. A good attendance is reported.—News Clipping.

Highland County Medical Society held its regular monthly meeting at the Hillsboro hospital on Wednesday, March 5, with sixteen members present at the noon luncheon. Dr. J. H. J. Upham, Columbus, Dean of Ohio State University College of Medicine, addressed the society on "Anemia".

On Wednesday, April 2, the Society was host to the Five County Medical Society. The meeting opened with a luncheon at the Parker Hotel, Hillsboro. "Hypertension with some Newer Phases of Circulation" was the subject of an address by Dr. John E. Greiwe, of Cincinnati.—News Clipping.

Second District

Clark County Medical Society held its regular luncheon meeting on Wednesday, March 13 at Hotel Shawnee, Springfield. Dr. R. B. Cofield, Associate Professor of Orthopedic Surgery of the University of Cincinnati, addressed the society on "Treatment of Infantile Paralysis". Discussion was opened by Dr. J. A. Link. The Society adopted a resolution accepting with appreciation a gift of 300 medical books, donated by Mrs. H. G. Miller, widow of the late Dr. Miller, for the beginning of a medical library being installed at the Warder Public Library.—News Clipping.

Darke County Medical Society met on Friday evening, April 11 at Small's Restaurant, Greenville. Following the dinner, Dr. Walter B. Taggart, of Dayton, presented a paper on "Some Problems of Infant Feeding".—Bulletin.

Miami County Medical Society held its regular meeting at the Stouder Memorial Hospital, Troy, on Friday, April 4. The program included a

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District No. 15—Portsmouth General Hospital, Portsmouth, Ohio. Phone: 559

paper on "Squint", presented by Drs. E. A. and R. D. Yates.—Bulletin.

Montgomery County Medical Society held its regular meeting on Friday evening, March 21, in the Fidelity Building. Dr. E. O. Smith, Professor of Urology of the University of Cincinnati, spoke on the subject of "Urinary Calculi, with Special Reference to End Results". Lantern slides were used to illustrate his lecture.

The April meeting of the Society was held on Friday evening, April 4, at the National Military Home, with Col. Vernon Roberts and members of his staff as hosts. Following a dinner at 7 o'clock, a light comedy picture was shown, and the program of the evening was presented. 1. A paper on "Pneumothorax"; 2. Case report on "Injection Treatment of Varicose Veins"; 3. Case report on "Dermatological Manifestation of Tertiary Syphilis"; 4. Case report on "Mediastinal Tumor".—Program.

Shelby County Medical Society held its regular meeting on Friday, April 4 in the Chamber of Commerce Rooms, Sidney, with the following members present: Dr. M. F. Hussey, Cyril Hussey, V. W. LeMaster, A. R. Edwards, R. E. Paul, O. O. LeMaster and B. S. Stephenson. Dr. Paul gave a very interesting paper on "Tuberculosis among Children", which brought about a general discussion by all of the doctors present.—B. S. Stephenson, Secretary.

Third District

Seneca County Medical Society held its regular monthly meeting at the Shawhan hotel, Tiffin, on Thursday evening, March 20. Following a dinner, Dr. G. I. Nelson, Associate Professor of Internal Medicine, Ohio State University College of Medicine, addressed the society on "The Diabetic Patient, with Special Regard to Coma".—News Clipping.

Wyandot County Medical Society met at the Carnegie Library, Upper Sandusky, on Friday evening, March 14 for its regular meeting. An interesting paper on "Man" was presented by Dr. I. N. Bowman.—News Clipping.

Fourth District

TOLEDO ACADEMY OF MEDICINE

(A. P. Hancuff, M.D., Secretary)

April 4—General Meeting of the Academy, at the Academy building, Buffet supper at the University Club. Program: "Primary Carcinoma of the Lung", illustrated by lantern slides, by Dr. Howard T. Karsner, Professor of Pathology at Western Reserve University, Cleveland.

April 11—Section of Pathology, Experimental Medicine and Bacteriology. Program: "Junior Kehr, Toledo's Five Year Old Wonder Boy in Person", also motion pictures, by Dr. J. S. Teter; "The Trend of Dermatology in General Practice" by Dr. Edward Binzer; "Chorea" (case report) by Dr. J. B. Rucker.

April 18—Medical Section. Program: "Milk as the Cause of Malnutrition", by Dr. Lawrence I. Clark; "Brain Tumor" (case report) by Dr. R. E. Boice; "Rat Bite Fever", (case report) by Dr. N. P. Stauffer; "Milroy's Disease", (case report), by Dr. A. J. Bershon.

April 25—Surgical Section. Program: "Umbilical Cord Complications during Labor", by Dr. John Gardiner; "Perinephritic Abscess", by Dr. Byron G. Shaffer; "Interesting Glandular Case", by Dr. Paul Hohly.—Bulletin.

Van Wert County Medical Society held a dinner meeting at the Y.W.C.A., Van Wert, on Tuesday evening, March 18. Papers were presented by Drs. W. J. Reuter, Ohio City, and J. P. Sampsell, of Van Wert.—News Clipping.

Wood County Medical Society met at the Woman's Building, Bowling Green, on Thursday evening, March 20th for a dinner meeting. The guest speaker was Dr. Benjamin Gillette, of Toledo, who discussed the subject of "Pitfalls in the Diagnosis of Right Sided Abdominal Pain."—News Clipping.

Fifth District

ACADEMY OF MEDICINE OF CLEVELAND

(Claude D. Waltz, M.D., Secretary)

April 4—Clinical and Pathological Section. Program: "Report of a Case of Xerostomia", by



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April 11—Experimental Medicine Section. Program: "Metaplasia of Endometrial Epithelium", by Dr. Anna M. Young; "Quantitative Observations on the Semilunar Valves of the Heart", by Dr. Paul Gross; "The Experimental Production in Dogs of Dental Granulomata", (by invitation) by Thomas J. Hill, D.D.S.; "The Relation of Urine Output and Open Glomeruli after Unilateral Nephrectomy" (preliminary report), by Dr. Ward W. Summerville; "The Total Number of Glomeruli in the Normal Human Kidney", by Dr. Robert A. Moore; "Comparative Effect of Irradiated and Non-Irradiated Oils on Production of Goiter, Atherosclerosis and Hypercholesterolemia", by Dr. David Seecof; "Cutaneous Reactions with Filtrates of the Colon Typhoid Type", (Dept. of Hygiene and Bacteriology) E. E. Ecker, Ph.D. and (by invitation) H. Welch, Ph. B., M.S. (All papers illustrated with slides.)

April 16—Industrial Medicine and Orthopedic Section. Program: "Industrial Dermatoses", by Dr. James R. Driver; "Osteochondritis", by Dr. Maxwell Harbin.

April 18—Regular Academy Meeting. Program: Symposium on Legal Medicine; "State Regulation of Medical Practice", by C. M. Finfrock, secretary, Western Reserve University School of Law; Discussion opened by Dr. C. W. Stone; "The Doctor in Court", by Dr. R. B. Newcomb; Discussion opened by Dr. G. E. Follansbee; "Some of the More Common Suits Against Doctors", by E. A. Foote; Discussion opened by W. G. Stern; "Legal Relationship between Doctor and Patient", by Hubert B. Fuller; Discussion opened by Dr. J. E. Tuckerman.

April 25—Ophthalmological and Oto-laryngological Section. Dinner meeting, followed by program.

April 30—Obstetrical and Gynecological Section. Program: "The Speculations on the Causes of Puerperal Infection in Pre-antiseptic Times", by Dr. J. J. Thomas; "Fetal and Neonatal Deaths; Their Causes and Preventions", by Dr. A. J. Skeel; "Hydramnios Associated with Deformities", by Dr. E. P. Kennedy; "Roentgen Pelvimetry (Thomas method) with Demonstration of Apparatus and *X*-ray Films", by Dr. W. I. LeFevre.—Bulletin.

Ashtabula County Medical Society held its regular meeting on Tuesday evening, April 8 at

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the Medical Building, Ashtabula. Following the transaction of minor business, the scientific program was presented by Dr. T. A. Willis, of Cleveland, who gave a talk and demonstration on "Fractures of the Forearm". A general discussion followed. This was an interesting and instructive meeting, and the attendance was exceptionally good. The Society voted to sponsor a Tuberculosis Clinic, to be conducted by the State Department of Health on May 27 and 28 in Ashtabula.

The March meeting of the Society was held on Tuesday evening, March 11 at the Medical Building, with Dr. Edgar P. McNamee of Cleveland as the guest speaker. His talk on "Post Surgical Pulmonary Atelectasis" was illustrated with lantern slides.—William Millberg, Secretary.

Erie County Medical Society held its regular meeting in Sandusky on Wednesday noon, March 26. Dr. John A. Lukens, of Toledo, was our speaker and his paper was on "Radical Mastoid Operation with Skin Graft", and a discussion of complications of middle ear disease.—G. A. Stimson, Secretary.

Lake County Medical Society met in Painesville for its March meeting. Dr. L. F. Huffman, of Cleveland, read a paper entitled "Interpretation of Urinary Findings."—F. J. Dineen, Secretary.

Lorain County Medical Society held its April meeting at the Antler's Hotel, Lorain, on Tuesday evening, April 8, commencing with a fish dinner. "The subject of "Tuberculosis in Children" was presented by Dr. M. Melvin Clark, and our president, Dr. W. S. Baldwin.—Bulletin.

Sixth District

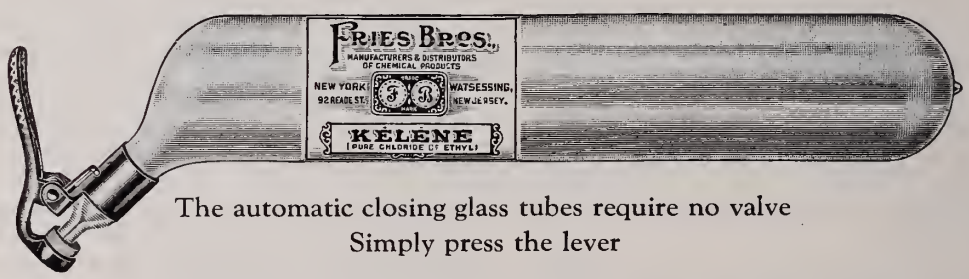
Mahoning County Medical Society held a union meeting with the Sixth Councilor District Society on Wednesday, April 9, at the Reuben McMillan Library hall in Youngstown. The afternoon session included the following program: "Periodic Health Examinations", by Dr. A. O. DeWeese, Kent State College physician; "Compression Fractures of the Spine", by Dr. Jay D. Smith, of Akron; "Some Thoughts and Slides on Plastic Surgery", by Dr. J. Huber Wagner, Instructor in Surgery, University of Pittsburgh. A dinner at the Elk's Club was followed by an address on "Hospital Treatment of Lobar Pneumonia", by Dr. M. A. Blankenhorn, of Lakeside Hospital, Cleveland.—Bulletin.

Portage County Medical Society met at the residence of Dr. W. J. Thomas in Ravenna on Thursday evening, April 3. Dr. G. J. Waggoner, of Ravenna, gave a synopsis of proposed amendments to the State constitution; after discussion, delegates were instructed to support them. Members of the Society provided the program, which

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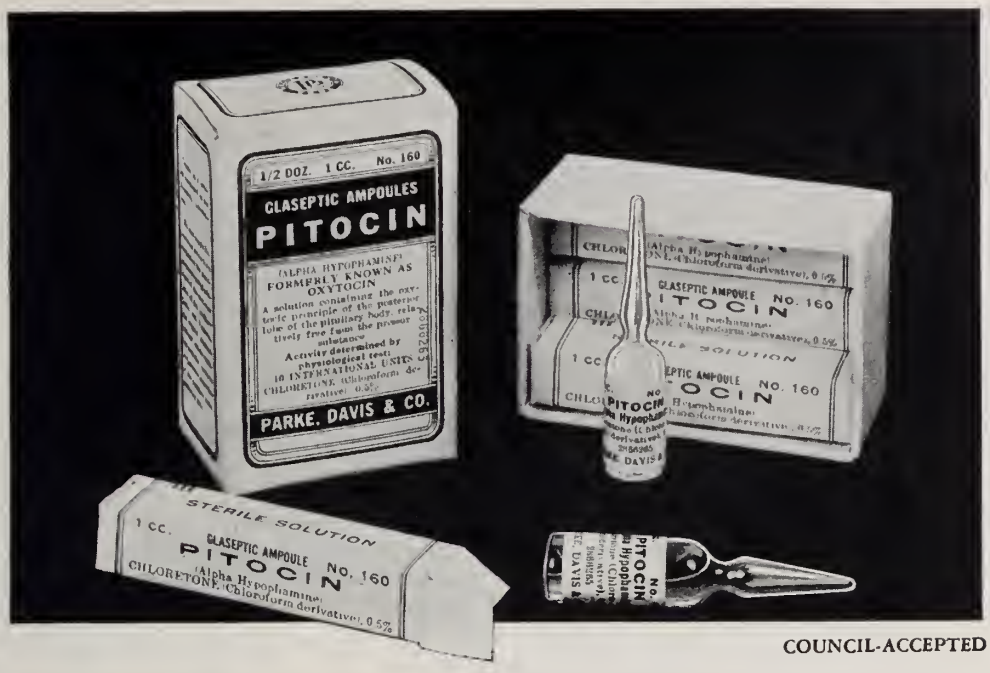


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included an interesting talk on "Undulant Fever", by Dr. J. S. Deyell of Ravenna, with discussion of a number of cases he had seen at Toronto University Hospital. Dr. A. M. Landsborough, Garrettsville, read an excellent paper on "Foreign Bodies Inhaled or Swallowed", giving autopsy findings of one fatal case.—E. J. Widdecombe, Secretary.

Stark County Medical Society held its regular meeting on Tuesday evening, April 8 in the Medical Library, Canton. The program consisted of a discussion of State Industrial Problems by Dr. H. H. Dorr, Chief Medical Examiner of the State Industrial Commission, Columbus.—Bulletin.

Summit County Medical Society met on Tuesday evening, April 1 at the Akron City Club, for its regular meeting. "Random Thoughts, Serious and Otherwise, Concerning Physio-Therapy", was the subject of an address by Dr. Walter G. Stern, of Cleveland.—Bulletin.

Seventh District

Columbiana County Medical Society held its regular meeting in the Memorial Building, Salem, on Tuesday afternoon, March 11, with eighteen members present. Dr. Henry J. John, of Cleveland discussed the subject of "Diabetes".—Bulletin.

The April meeting of the Society was held at the Y.M.C.A. in East Liverpool, on Tuesday afternoon, April 8. "The Early Diagnosis of Tuberculosis" was the subject of an address by Dr. E. E. Kirkwood of Youngstown.—Bulletin.

Coshocton County Medical Society held its regular meeting on Thursday evening, March 27, at the Nurses Home, Coshocton. The following papers were presented: "State Medicine", by Dr. Lister Pomerene, and "Diseases of the Gall Bladder", by Dr. Nathan Hammond.

Jefferson County Medical Society met Friday evening, March 28th, in the Nurses' Home of the Ohio Valley Hospital. The society was addressed by Dr. J. C. M. Floyd, dean of Jefferson County physicians and former president of the Ohio State Medical Association. He traced the history of the society since its organization in July, 1858. Dr. Floyd was admitted as the 29th member of the Jefferson County Medical Society in 1878.—M. H. Rosenblum, Secretary.

Tuscarawas County Medical Society met in the offices of Dr. M. W. Everhard and F. B. Larimore, New Philadelphia, on Thursday evening, March 13, with 27 members present. Dr. Everhard gave an interesting talk in which he cited various unusual cases. Dr. Larimore displayed his collection of Indian relics, blankets and rugs in his descriptive talk on the Southwest. Mrs. Everhard gave several well chosen readings. Refreshments were served following the program.—News Clipping.

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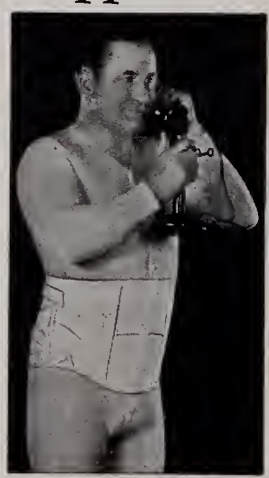
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Eighth District

Hocking County Medical Society held its regularly quarterly meeting at Logan on Thursday, March 27. The meeting was well attended and was made very interesting and instructive by the splendid case reports by several of the members present. Officers elected for 1930 at the January meeting of the Society are: President, Dr. O. V. Donaldson; vice president, Dr. M. M. Adams; secretary-treasurer, and correspondent to *The Journal*, Dr. M. H. Cherrington (re-elected); legislative committeeman, Dr. J. S. Cherrington; medical defense committeeman, Dr. J. L. Webb. Delegate to state meeting, Dr. M. H. Cherrington, and alternate, Dr. J. S. Cherrington.—M. H. Cherrington, Correspondent.

Muskingum County Academy of Medicine met Wednesday evening, April 2 in the American Legion rooms, Zanesville, for its regular monthly meeting. The following program was presented: "Demonstration of a Pathological Specimen", by Dr. H. T. Glaser; "Pneumonia in Children", by Dr. G. Warburton.—Bulletin.

Washington County Medical Society held its regular meeting at Memorial Hospital, Marietta on Wednesday, March 12. Dr. E. W. Hill, Jr., read an able paper on "Gynecology", followed by discussion by Dr. A. H. Smith and Dr. J. F. Weber.—J. R. Warren, Secretary.

Ninth District

Scioto County—The regular meeting of the Hempstead Academy of Medicine was held on Monday evening, April 14 at the Recreation Hall, Nurses Home, Portsmouth. The program was as follows: "Some Kidney Conditions in Early Adult Life", by Dr. Henry B. Freiberg, of Cincinnati, with discussion opened by Dr. Frank Beeks and Dr. C. W. Wendelken, of Portsmouth. A buffet lunch was served following the meeting. —Bulletin.

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

March 17—Regular meeting of the Academy held in the Public Library, Columbus. Program: Case Reports. An Unusual Case of Appendicitis, by Dr. J. F. Baldwin; Block Anesthesia for Tumor of Parotid, by Dr. R. R. Kahle; "Diagnosis and Treatment of Meningococcic Meningitis", by Dr. S. A. Edelman, with discussion by Drs. E. G. Horton and O. L. Baldwin.

March 24—Program: "Recent Developments in the Modern Treatment of Fractures", illustrated with Lantern Slides. By Dr. A. M. Steinfeld, with discussion by Drs. Joseph Price and William Morrison.

March 31—Organization meeting of the General Practitioners Section, as recently approved by the Council of the Academy.

April 7—Program: "Practical Demonstration of U. S. P. Dispensing from the Standpoint of the General Practitioner" (lantern slides), by Dr.

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John Rauschkolb, with discussion by Drs. K. H. Armen, J. S. Carlton and R. B. Taylor; "The Cultivation of Living Tissue" (Canti Film—British Moving Picture), Drs. J. H. J. Upham and Ernest Scott.—Bulletin.

Crawford County Medical Society held its regular meeting at the Elk's Club, Bucyrus, on Monday evening, March 24. The visiting speaker was Dr. Frank W. Harrah, of Columbus.—News Clipping.

Ross County Academy of Medicine met Thursday evening, March 6 in Chillicothe, for its regular monthly meeting. "The Alleged High Cost of Medicine or Medical Attention" was the subject of an intensely interesting paper presented by Dr. C. M. Shepard, of Columbus.—W. C. Breth, Secretary.

HOSPITAL NOTES

—Many hospitals in Ohio will observe the tenth anniversary of National Hospital Day, May 12. Many institutions are planning "open house", reunion of babies, inspection of departments and other features for the purpose of stimulating public interest in the work which hospitals are doing. Some of the larger hospitals and various hospital organizations will sponsor radio programs as in previous years.

—Dr. Joseph Price has been re-elected treasurer and chief of staff of Mercy Hospital, Columbus.

—A series of lectures is being broadcast to patients at St. Luke's Hospital, Cleveland, through a hook-up within the institution. Those who have spoken to date are: Dr. R. S. McGinnis, Dr. T. A. Willis and Dr. W. H. Tuckerman.

—Among the newly-elected trustees of McKitrick Hospital, Kenton, are Drs. W. N. Mundy, Forest; J. K. Evans, McGuffey, and Dr. W. H. Rabberman, Forest.

—Deaconess Hospital, Ironton, is being remodeled and enlarged.

—Plans for enlarging the Monnett Memorial Hospital, Bucyrus, are being considered by members of the hospital association.

—Dr. George F. Swan, Cambridge, has purchased the 15-bed hospital of Dr. W. W. Lawrence and is planning to enlarge the institution.

—A contract for erection of a sick and invalid building at the Lorain County Home has been awarded at a bid of $80,619.

—Improvements to cost $27,000 will be made at the Elyria Memorial Hospital, J. R. Mannix, superintendent, has announced.

—Miss Martha Owen, formerly superintendent

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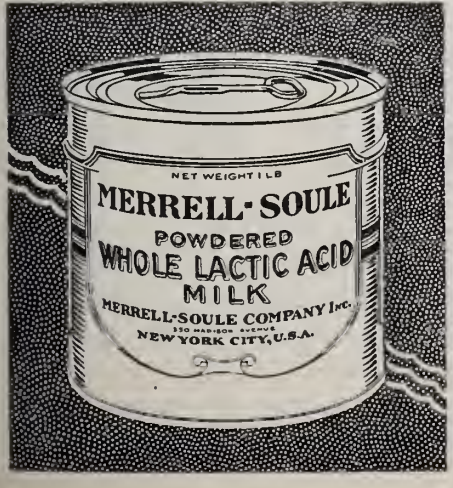
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of the Twin City Hospital, Dennison, has accepted a supervising position at Radium Hospital, Columbus.

—Radio receiving sets have been installed in every room at the Memorial Hospital, Elyria.

—General contract for construction of final units in the $1,500,000 building program for Charity Hospital, Cleveland, has been let. Approximately $600,000 worth of new construction is provided for.

—Higher cost of equipment, supplies and labor and greatly increased efficiency are responsible for the additional expense in the cost of hospital service during the past two decades, A. G. Lohmann, superintendent of Deaconess Hospital, Cincinnati, has reported to his board of trustees. His report showed that from 1914, when the average daily cost per patient was $1.73, there was a steady mounting cost until 1927 when it reached $6.00. In the last two years there has been a decrease, the per capita cost in 1929 being $5.63, the superintendent reported.

—After two years deliberation, marked by disagreement and court litigation, the Springfield City Commission has selected a site for the new $1,800,000 City Hospital. Condemnation proceedings have been instituted and work on the building will be started as soon as possible.

—More autopsies should be performed as a means of advancement in medical science, Dr. Cyril C. Sturgis, School of Medicine, University of Michigan, told members of the staff of the Toledo Hospital at a recent meeting. He emphasized the necessity of autopsies in the training of interns. A bronze plaque of W. W. Knight, president of the board of trustees of the hospital, was unveiled preceding the meeting. The presentation address was made by Dr. K. D. Figley, secretary of the staff.

—W. R. Hopkins, former city manager of Cleveland, has been named chairman of the campaign to raise $1,000,000 for the new plant of the Huron Road Hospital Association, Cleveland.

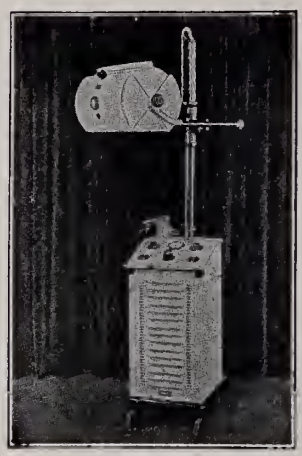
—A campaign for $8,000 for operation and improvements at the Mercy Hospital, Tiffin, is under way.

—Drs. J. C. M. Floyd, A. E. Weinstein and Reed Cranmer have been elected members of the board of directors of the Ohio Valley Hospital, Steubenville.

—Members of the Lima City Commission and a joint committee from the Allen County Medical Society and the Lima Hospital Association are holding a series of conferences looking toward drafting of plans for erection of a new city hospital, the funds for which have been voted twice by the electors of the city.

—Dr. Stanley S. Sidenberg, acting superintendent of the Molly Stark Tuberculosis Hospital, Stark County, was injured when wires on an

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X-ray outfit short-circuited. Dr. Sidenberg was named acting head of the hospital following the resignation of Dr. H. O. Black, who vacated the position because of his health.

—Willard's new municipal hospital was dedicated with formal services March 30. More than 1700 visitors registered during the day and inspected the plant.

—Dr. Albert H. Freiberg, Cincinnati, president of the Ohio State Medical Association, was one of the speakers at the annual convention of the Ohio State Hospital Association at the Gibson Hotel, Cincinnati, April 29 and 30.

—Louis C. Levy, superintendent of the Jewish Hospital, Cincinnati, for the past 10 years, has resigned.

—Construction of the new $1,475,000 hospital at the National Military Home, Dayton, will be started in May.

—Ground has been broken for the new $2,000,000 Dayton Good Samaritan Hospital.

—A trust fund of $10,000 for the Massillon City Hospital is created under the will of the late Annie Steese Baldwin, a life long resident of Massillon.

—The major portion of the $400,000 estate left by Mrs. Margaret J. Stone is bequeathed to the Akron City and Akron Children's Hospitals.

—Dr. Albert H. Freiberg, president of the Ohio State Medical Association, has been reelected dean of the medical staff of the Cincinnati Jewish Hospital. Dr. J. Louis Ransohoff was named vice dean and Dr. Henry B. Freiberg, secretary. The medical board consists of Dr. Louis J. Heyn, Dr. Samuel Iglauer and Dr. Gilbert Mombach.

—Bonds for $30,000 will be sold by the city of Bellefontaine to pay for improvements at the Mary Rutan Hospital.

—Nothing but "safety" *X*-ray films will be used in the Jewish Hospital, Cincinnati, the board of trustees has decided.

—The following staff committees have been announced by Dr. George B. Topmoeller, chief of staff, St. Mary's Hospital, Cincinnati:

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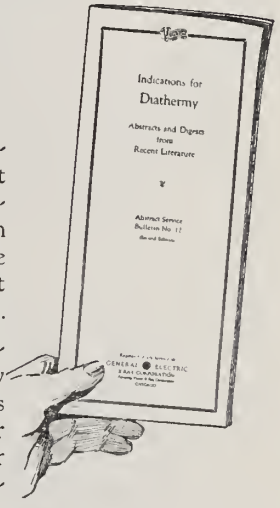
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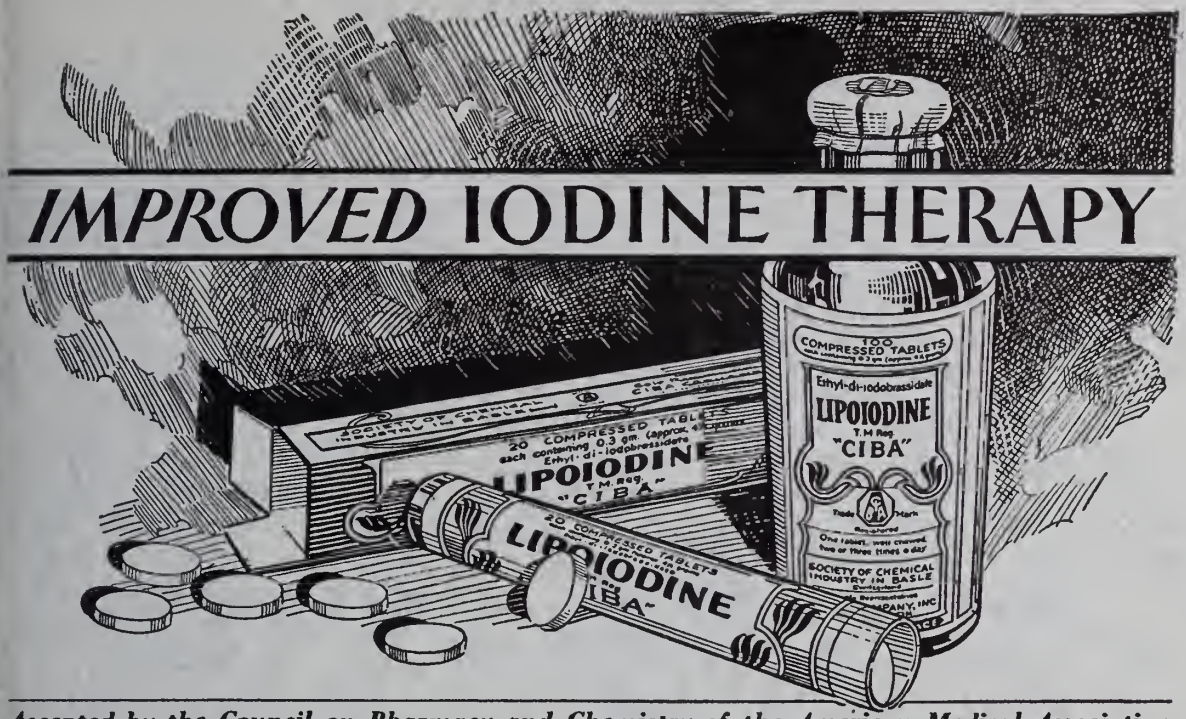
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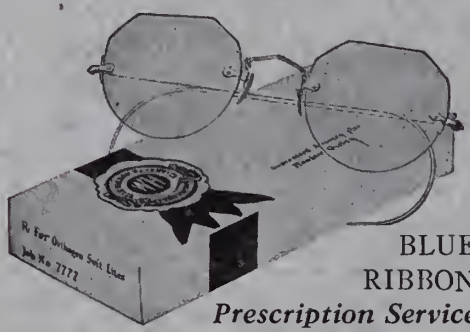
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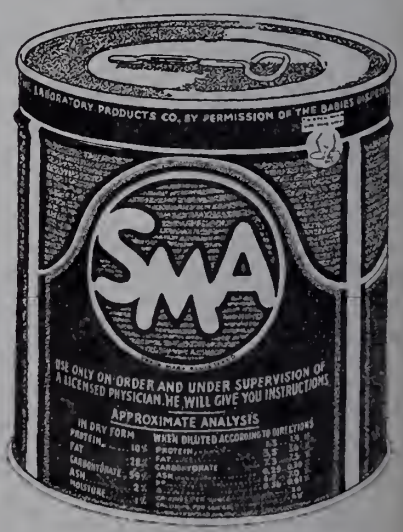
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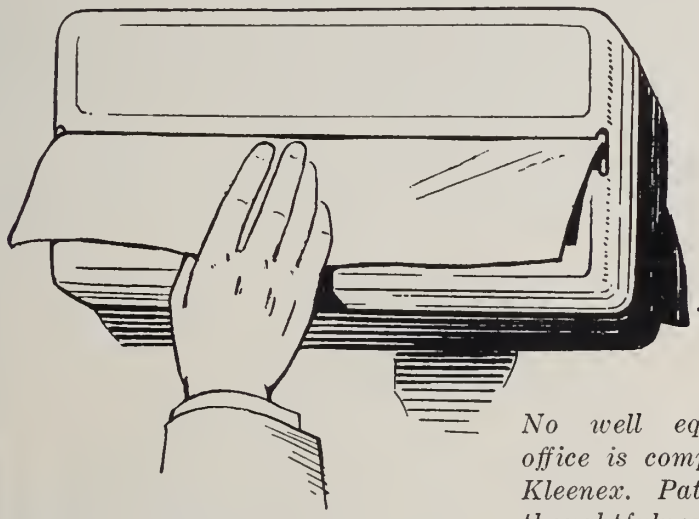
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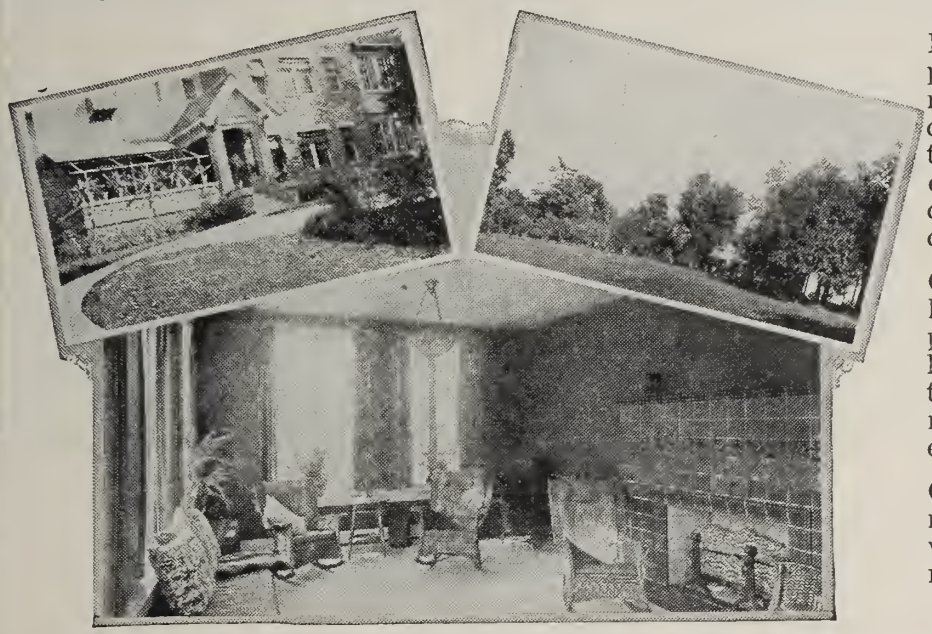
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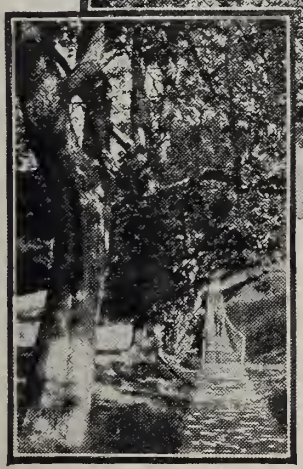
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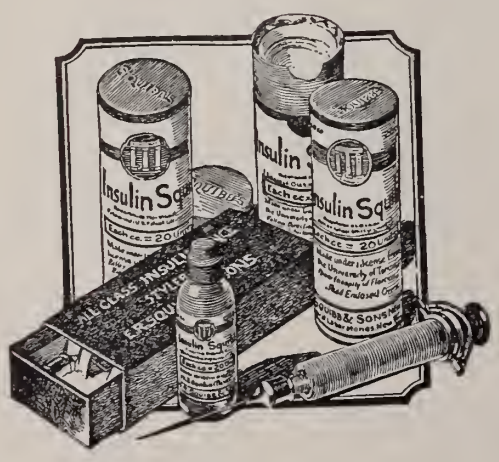
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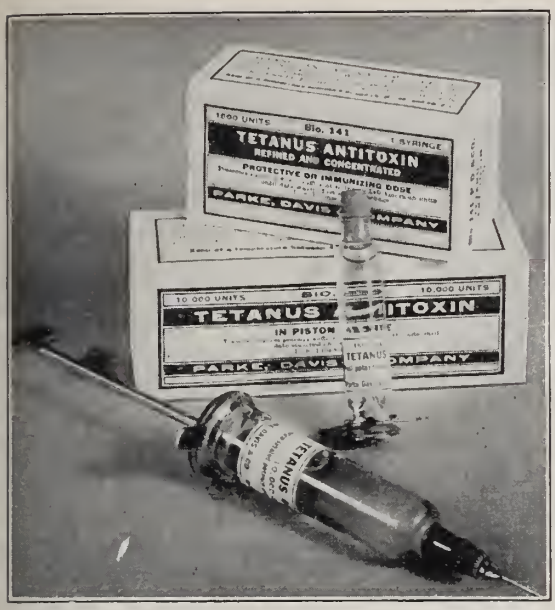
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PUBLIC HEALTH - SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

The Spirit and Success of the Annual Meeting

Evidence that organized medicine in Ohio faces the future with its house in order, its ranks undivided and its lofty and sound principles and ideals triumphant was manifest to a high degree during the Eighty-Fourth Annual Meeting of the Ohio State Medical Association, held in Columbus, May 13, 14 and 15.

Celebration of the passing of another milestone by organized medicine in this state offered once again an opportunity to take inventory of the twelve months which have passed as well as the chance to analyze the future and anticipate many of the problems which the ensuing year will bring.

The Columbus meeting was one of the best ever held by the State Association. A splendid attendance was recorded, testifying to the fact that Ohio physicians are always ready and willing to expend the time and money to participate in such valuable and constructive gatherings.

The 1930 meeting also demonstrated that Ohio physicians are actively interested in their State Association. The splendid spirit of cooperation and enthusiasm displayed by all who attended, showed beyond all doubt that members of the medical profession are prepared to stand shoulder to shoulder and battle if necessary for the health and welfare of the public, the high ideals of medicine and the social and economic security of the practicing medical profession.

Little need be said of the high caliber of the scientific programs—the subjects discussed and the outstanding ability of the essayists and discussants are adequate proof of the excellency of that phase of the annual meeting. Those who played any part in making the scientific programs the success they were, deserve abundant praise for their valuable service.

Those who have attended many annual meetings and who have had long experience in the business affairs of organized medicine have voiced the opinion that the House of Delegates of the 1930 meeting was called upon to transact an unprecedented amount of vital and important business.

How well the 1930 House of Delegates performed the important duties assigned to it is recorded in the official minutes of the two sessions held by that assembly and published elsewhere in this issue of *The Journal*. Frank discussions were held. Serious and thorough study was devoted to all questions. Fearless decisions were made, each based entirely on unselfish motives and with the best interest of the public and the scientific medicine at heart. Keen judgment was displayed in official action on the complex and confusing problems which arose. Special commendation is due the members of the various reference committees who labored long and conscientiously on their special assignments.

The eighty-fourth annual meeting brought to a close the successful, able and faithful presidency of Dr. Albert H. Freiberg of Cincinnati. Dr. Freiberg's high standing in as well as outside the profession and his recognized characteristics as a scholar of unusual breadth and his unusual attainments as a physician have reflected honor on his colleagues in the medical profession of Ohio. His sound, conservative and wise judgment on the important and complex medical-social problems have played a large role in the successful solution of many of the questions which have come before the State Association during his tenure of office. The sincere, courteous, kindly, gentlemanly and gracious manner which he always evidenced in his association with his colleagues, won for him the respect and devotion of all with whom he came in contact.

Having inaugurated a worthy successor to Dr. Freiberg in the person of Dr. C. W. Waggoner, Toledo, the State Association looks to the future with enthusiasm and with the assurance that it will have the benefit of further constructive leadership. Few, if any members of the medical profession have taken a more active interest in organized medicine, and in the social, economic and governmental phases of medical practice than Dr. Waggoner. His devotion to his profession and the State Association has been unexcelled and he has previously served faithfully and courageously in various important positions in medical organizations thus ably fitting him for his new honors, duties and responsibilities. His knowledge of the difficult health and medical questions confronting the public and the medical profession, his aggressiveness and initiative, his clear analysis of pending problems, his unselfish motives and his deep desire to serve the people and his colleagues to the best of his ability and for their best interests, are added assurances that

the reins of the State Association are in safe, energetic and capable hands.

Selection by the House of Delegates of Dr. D. C. Houser, Urbana, as president-elect, demonstrates once more the farsighted and clear judgment which has been shown by the House of Delegates of the State Association in choosing genuine and representative leaders.

Dr. Houser's modest and unassuming manner, his experience as a Councilor and in many other organization capacities, his constructive and conservative attitude, his standing as a good citizen and a competent practicing physician, and his honest and sincere desire to utilize all his ability and energy for the good of the public and his profession, clothe him with the attributes necessary for strong and worthy leadership.

Last but not least, the 1930 annual meeting reflected what mighty things may be accomplished by teamwork, cooperation, service, initiative and untiring effort. Too much praise and appreciation cannot be extended to the members of the various committees, of the Columbus Academy of Medicine, under the experienced, and tireless general chairmanship of Dr. S. J. Goodman, who furnished the forces that played so prominent a part in making the annual gathering an outstanding success. Hard and conscientious work was done in arranging and carrying out the innumerable details in connection with the meeting. There were no unnecessary delays or embarrassing mistakes, largely because of careful planning for committeemen to be on the job at all times to see that everything was being attended to properly. Columbus physicians again proved themselves gracious, as well as efficient, hosts.

The one, outstanding conclusion to be drawn from the gathering when viewed from all angles seems to be that organized medicine in Ohio is solidified, fully capable of guiding its own destiny, prepared to defend its ideals, ready to battle for the best interests of the people, awake to the numerous crises impending and in formulating solution for them, unafraid of the future, knowing that the energy, ability and support of the great majority of physicians of Ohio are available and constitute the foundation on which medical organization may build toward even greater achievements and accomplishments.

Responding to Emergencies

Scores of Ohio physicians have won the right to wear new disaster service stripes and have demonstrated once again that the medical profession can always be counted on to take a prominent part where human life is at stake.

Among the first outsiders mobilized for emergency duty at the recent fatal fire at the Ohio Penitentiary, in which 320 prisoners lost their lives and several hundred were injured, were the physicians of Columbus, and dozens of surrounding cities and towns.

Dozens of members of the medical profession who responded so promptly to the appeal for help broadcast by state officials labored all night ministering to the injured and dying.

The Penitentiary disaster and previous similar tragedies are graphic reminders of the indispensable role which scientific medicine and members of the medical profession play in the course of human events. It is significant that those who offer healing methods as substitutes for scientific medicine and those who hoodwink certain groups of the public into believing that mystic cultism is the only sure medium to happiness and health are never called in such emergencies.

The medical profession of Ohio always has responded nobly to cries of distress whether they come from individuals or groups of individuals. It will be ready and willing to meet the challenge of future disasters.

Economic Desires Versus Social Needs

The similarity between economic questions troubling the medical profession and industry generally is indicated in an editorial appearing in the *Fourth District Finance and Industry*, reviewing the changes which have taken place in the past 30 years and commenting on some of the problems confronting leaders in industry and commerce.

After citing statistics to show how business has progressed in the past three decades, the Cleveland publication says:

"The lackadaisical era in which people called one another by their first names and in which handshaking was in golden fashion, had to be superseded by the hustle and bustle of a busy business age. Vast hubs of people, centers of hundreds of thousands, even millions, right in this federal reserve district, called for transition of daily personal habits, as well as in channels of trade.

"Some declare now that mass production has increased supplies of goods so much that business has had to temporarily slow down. But irrespective of such opinion, the present period offers opportunity for profit by reflection. By looking over the past five as well as over 25, 30 or 50 years, now should be a good time to take inventory and see if the whole mechanism of human enterprise hasn't been geared a little too fast.

"To the extent that business is unduly stimulated or over-encouraged by partial payment accounts, in proportion as living beyond financial capacity to pay is concerned, periods like the present should be but natural. There is a limit to which purse can pay, or to the flexibility of credit.

"There is a record today of excess in luxuries. Many believe they must live like their neighbors,

in other words, by comparison. This has proved in numberless cases to have been unfortunate and cause for trouble, domestic, also economic. The family and the state both suffer by such artificiality. * * *

"People have had to pay for comfort, pleasure and the increased advantages over their predecessors. Cost has been in the form of payment for individual transportation, for taxes, interest, and very often what should be the savings account, but the price, whatever it may be, goes back into the sum total of productive capacity, the products of which are in turn consumed; and around and around goes the wheel of progress. Sometimes one cannot help but wonder whether extravagances are not the answer to slowing up in many lines. If that be true the country, even this particular territory, will be the better off. There is no more beautiful story in all the annals of time than the return of the prodigal son."

Thus it, would seem that most of the problems which confront all professions and all businesses are caused by some weakness in some of the modern economic and social principles.

A return to more sane and normal methods, both on the part of the producer and the consumer, may go a long way toward solving many of these questions. The solution found by medicine may go far toward helping business solve its difficulties, and vice versa. It is certain that a spirit of cooperation would do much toward ironing out most of these questions which are so intimately related.

Importance of Careful Statements

Physicians who are called upon to address public gatherings or contribute to scientific or popular magazines are required to be cautious in the way in which they express personal opinions or draw general conclusions from scattered instances.

Several statements within recent months which have been attributed to certain widely-known members of the profession have been more damaging than helpful to the harmonious relationship and understanding which should exist between the profession and the public.

It is perhaps true that some of these authorities have been misquoted in the press. Possibly the arguments which some of them have advanced have been misunderstood and misinterpreted. Nevertheless, all physicians should avoid furnishing unsympathetic and radical groups with ammunition which, through misinterpretation may be used against the profession and above all have a harmful effect on the proper relationship which should exist between the public and the medical profession.

In a recent editorial, the editor of the *New England Journal of Medicine* made some pertinent comments on this subject, in part as follows:

"Physicians as a class should understand that reactions of the average person to statements may arouse misunderstanding or resentment. The old admonition to cultivate the wisdom of the serpent and yet be as harmless as doves seems to apply at the present time when doctors unburden their minds on subjects which appeal to the laity.

"It is common knowledge that the report of the saying of an eminent physician with respect to the proportion of errors in diagnosis has been seized upon and quoted by many in arguments designed to confute the pleas of doctors. It may be that the statement has not been correctly reported and too it may be that serious abuses exist in other parts of the country more than in the region with which we are familiar; and further that the author of the statement has facts at his command justifying his accusation. However, those who are engaged in the work of trying to convince the public of the duty to support hospitals may wish that if abuses exist the effort to correct them should be inaugurated without public denunciation of a general character. We believe in specific statements of wrong doing but deplore sweeping charges of objectional practice without corroborative facts.

"We respectfully suggest that unless it seems to be necessary in certain cases physicians should be careful to avoid criticising hospitals or making other statements which may not have specific application. By all means doctors should try to bring about reforms when indicated, but it is not good policy to furnish unsympathetic persons with arguments which will do harm."

Value of Intern Training

Some young physicians now serving hospital internships are prone to regard the period of clinical training in such institutions as a waste of time and have the tendency to view lightly the opportunities offered by such work.

Fortunate is the newly-graduated physician who cashes in to the fullest extent on the chance which has been given him to obtain first-hand and personal knowledge of disease and the interesting and complicated relationship between the doctor and patient.

How well the intern reacts to the opportunity awaiting him depends largely on the methods of the hospital in which he is working and on the efficiency and personal interest of the institution's administrative and scientific staffs.

Regarding the responsibilities and duties of hospital authorities in relation to the interns serving under them, *The Modern Hospital* recently made the following timely comment:

"There is a duty to the intern that transcends the mere giving of an opportunity for the acquirement of medical knowledge. An internship

should be designed to give intelligent experience —intelligent in that every case should be made the modality of careful instruction. To become a good clinician, thousands of sick people must be studied minutely from the viewpoints of diagnosis and treatment. Unless the intern is so taught that every sign and symptom will automatically register, he will not gain the full benefit of his opportunities. All of this means at base the development of responsibility and everything that the intern does should be directed to that end. This is a duty that demands the best efforts of the profession of hospital medicine."

It is the opinion of many medical educators and members of the medical profession that the period of internship is one of the most vital stages in the development of the well-rounded and competent physician.

Might-Have Been Disasters

Many of the important discoveries of scientific and preventive medicine have failed to receive the recognition they deserve from a public which is inclined to pay little heed to "disasters which might have been".

As long as physicians continue to cure diseases which killed thousands annually throughout the world a hundred years ago, and as long as public health agencies, utilizing the discoveries of scientific medicine, continue to prevent epidemics and outbreaks by proper sanitation, quarantine and immunization programs, the public generally is content. The laity is inclined to care little about how physicians do it or think about what would have been had not the important discoveries of medical scientists been produced.

Those who scoff at the value of scientific medicine; those who believe that most of the modern theories on the cause and cure of disease are hokum; those who become impatient because the medical profession has not produced a cure for cancer or an effective way to eliminate influenza epidemics, would no doubt be startled if they had an opportunity to read some of the conclusions reached by Sir William Hunter, following a survey of mortality conditions in England before and after the passage of modern sanitation and health legislation in that country.

According to Sir William, if the rate of mortality which existed in England and Wales for the years 1847-1850 were applied to the four years 1916-1919, the following would have happened:

Typhus would have killed 100,000, whereas the actual number of deaths was 7.

Typhoid would have killed 70,000, whereas the actual number of deaths was 3626.

Cholera would have killed 114,000, instead of which there were no deaths from cholera for 30 years.

Smallpox would have killed 42,000, whereas the actual number of deaths was 110.

Scarlet fever would have killed 122,000, whereas the actual number of deaths was 5390.

Diphtheria would have killed 30,000, whereas the actual number of deaths was 19,631.

Measles would have killed 56,000, whereas the actual number of deaths was 29,272.

Whooping cough would have killed 66,000, whereas the actual number of deaths was 23,087.

The quick-trigger artists who take delight in taking pot-shots at scientific medicine and the medical profession on frequent occasions would do well to ponder over some of the "what might have beens" had medical science not been able to catch up and cope with many of the ailments which for years had been the scourge of humanity.

Danger From Self-Diagnosis

Thousands of persons die annually because of the untimely and improper use of laxatives, especially in the presence of acute abdominal pain, according to Dr. John O. Bower, writing in *Hygeia*.

Many persons who have stomach ache or abdominal pains attribute these to something they have eaten and their first thought, and usually their first act, is to take a laxative which in many cases aggravates the trouble and often causes serious sickness or death, Dr. Bower points out. He warns that few persons realize this danger and the necessity of consulting a physician before home remedies or unprescribed medicines of any kind are administered.

Dr. Bower has raised an important question in connection with the evils attending self-diagnosis and self-prescribing of medicines.

Education of the public on health matters has progressed rapidly within the past few years. much good has resulted. However, at the same time, there has arisen the danger of *over-education* and the establishing of a false security in the minds of many persons concerning their ability to diagnose and treat apparently minor ailments. Frequently there are found laymen who presume to know as much, if not more, about the prevention and cure of disease than trained physicians. Many learn of their incompetence in such matters too late.

Health education propaganda formulated under the direction of inexperienced persons and those who know little or nothing about the many dangers of self-medication or self-diagnosis is certain to be detrimental to the public health. Care should be taken in all such public information to emphasize to the laity that the scientifically trained physician is the one and only person competent to give advice and counsel on matters pertaining to health, as well as prescribe for and treat physical and mental ailments.

Annual Address of the President*

ALBERT H. FREIBERG, M.D., LL.D., F.A.C.S., Cincinnati

It is provided in the By-Laws of our Association that the President shall present an address; presumably with the purpose of acquainting the membership with the state of the affairs of the Association and of giving them an account of his stewardship. No one who is acquainted with the high character of service which has been rendered by his predecessors in this office throughout the long series of years in our history, can do this with equanimity. If, nevertheless, I approach this task with little fear, it is because of the neverfailing cooperation, the sympathetic kindly advice and the always friendly attitude of the other officers and the Council of the Association. Through them there has continued the building of a structure of enduring character, marked by a high degree of efficiency and an elevated morale, upon the secure foundation laid by the long line of distinguished men who have preceded them. If the administration of the past year has any success to its credit it is most largely due to that wise policy which provides for an unbroken succession of servants who have had to prove their devotion to the cause which our society represents and, as well, their wisdom in council, before they were entrusted with the large responsibilities which are entailed. The period which has elapsed since the last annual meeting has been one in which the opportunity has been afforded to look somewhat more deeply than usual into the purely internal affairs of the organization by reason of the fact that the State Legislature has not been in session. Thus there has been placed in suspension, at least, the need for concern with the many and often vexatious problems which are always involved with new projects of legislative nature. For this respite, however selfish it may appear, your President has been devoutly thankful.

To this absence of legislative activity there may be charged a term of comparative leisure for the *Committee on Public Policy*. This committee has continued to function with its usual efficiency under the always wise and thoughtful leadership of that veteran servant, Dr. J. H. J. Upham. To him must be offered all praise and appreciation for the great services which he has always been ready and so well able to render.

THE JOURNAL

There is no single activity of our organization more important than the conduct of its Journal. I need not expand upon this subject; so sure am I that this publication receives the enthusiastic commendation of the membership. It serves as a continuous bond between them and the organization during the long period between the annual sessions. There is every reason to believe that the great majority of the members look forward to its monthly appearance with expectant interest, containing as it always does, technical articles of value together with so much of informative news upon topics of general and personal nature. At the same time, there is scarcely possible an adequate realization of the amount and quality of the labor required to produce it and keep it up to its high standard. For this we have to thank our very faithful and uncommonly efficient Publication Committee, who edit the scientific material with meticulous care and who scrutinize all of the advertising copy which is submitted but also all of the other material which is published, with regard to its desirability and propriety. At the center of this work is our faithful and able Executive Secretary, Mr. Martin, to whom there is offered this special meed of praise. It may be of interest to learn that a representative of the Cooperative Medical Advertising Bureau of the American Medical Association has recently stated that our journal is more strict in its advertising requirements than any other state medical journal.

MEDICAL DEFENSE

The work of the committee on medical defense has been constantly growing in volume and detail and it involves matters of ever increasing complexity and variety. Its able chairman, Dr. J. E. Tuckerman, has for so long applied himself to his study of the multifarious medico-legal questions involved in this committee's work that he has acquired wide spread recognition of his accomplishment in this field. We are fortunate in having him and the other members of this committee acting in our behalf.

MEDICAL ECONOMICS

In this committee we have one whose activities are concerned with a wide variety of subjects, all of which are of very great importance to the Association, as such, but which also touch very closely the interests of the individual member. It is largely through this committee that the contacts with the Industrial Commission are maintained. It is a very great pleasure to offer commendation to the committee for the faithful performance of its duties.

The attention of your President has, several times, been attracted to a situation which arises from time to time in connection with work done under the Industrial Commission. Occasionally injuries are sustained by persons who are insured under the industrial compensation law, but whose salaries are of such magnitude that the physician feels that his reward should be in proportion to the patient's economic position rather than in accordance with the scale provided by the Industrial

*Delivered at the 84th Annual Meeting of The Ohio State Medical Association, Columbus, at the annual banquet, Neil House, Tuesday evening, May 13, 1930.

Commission. Technically, the patient has the right to be so treated; but the physician has equally the privilege of declining to render service on these terms, at any time he chooses. Exception is, of course, made to the duty of rendering emergency aid to any one requiring it, when it is possible to do so. The difficulty which arises is occasioned by the fact that, in calling the physician, the high-salaried individual fails to announce that he is demanding service as an industrial case until it is virtually, or even actually, completed. It is then too late for the physician to exercise his right of declining to serve under these conditions.

It would appear easy to correct this difficulty by making it incumbent upon the patient to claim service as an industrial case, in the beginning, in order to entitle him to it on such terms. While the situation referred to may not be of frequent occurrence, it constitutes a grave injustice to the physician whenever it happens and it is recommended that this matter be referred to the Committee on Economics for their consideration and effort.

FINANCE

There is every reason to congratulate this Association upon the condition of its finances. Attention has before now been drawn to the fact that unusually large return has been made in consideration of the low dues which we pay. Not only has it been possible to carry on the manifold activities of our organization, with its very large budget, at so small a cost to the individual member, but it has been possible to accumulate a satisfactory balance for future contingencies. This implies, not only a business-like management of our affairs, but also a very careful and constant scrutiny of expenditures and prudent foresight in the construction of our budget. All of this calls for much time and effort on the part of the Committee on Auditing and Appropriations. Their results speak for themselves and they deserve the gratitude of the organization. At the same time, it must be borne in mind that it is highly likely that an increase of the income of the Association will be required at some future time. In this eventuality, an increase in the annual dues will become necessary. This is not in contemplation at present.

EDUCATION AND HOSPITALS

The work of this committee embraces matters of very great importance to the progress of our profession and the conditions under which an increasingly large part of its labors are carried out. In full accordance with past experience its work has been faithfully expedited and with credit to its members.

SPECIAL COMMITTEES

The Committee on Periodical Health Examinations has been very active in establishing contacts with the component societies in order to diffuse a greater interest in this very important subject. I have elsewhere taken occasion to call attention to the importance of this activity of the physician and my conviction that the future standing of our profession is closely bound up with it. It must, unfortunately, be acknowledged that the general interest in this phase of our work is as yet by no means as great as it should be. I would here bespeak your careful reading of the report of this committee and your thoughtful attention to its recommendations.

The Committee on Mental Hygiene has been in constant and close touch with problems and developments throughout Ohio in that particular field and members of the committee have been instrumental with others in the organization of an Ohio Mental Hygiene Association. There has not yet been time for it to demonstrate what may be accomplished through it. At the same time, it is encouraging to know that its beginning is auspicious and its organization under such conditions as entitle it to our interest. It is to be hoped that it may accomplish great good by means which will entitle it to our cordial cooperation.

The special committee with which your President has been particularly concerned during the past year is the Committee on Revision of the Constitution, whose report has been published in the March number of the Journal. It is to be hoped that this may have the effect of a material strengthening of our organic structure. Your Council has experienced the need for this only recently, inasmuch as a component society sought to act in a disciplinary matter without being in possession of any constitution or by-laws upon which action could be predicated. It is my recommendation that there be created a Council Committee on Conformity, whose duty it should be to bring about the necessary uniformity in the provisions of the constitution and by-laws of the component organizations. This committee should also be charged with the production of a model constitution and by-laws for the guidance of component societies. In case this is done, it is likely that Council will find it expedient to authorize necessary expenditure of funds to accomplish the purpose.

What has been said is offered in evidence of the multiform activities of the Ohio State Medical Association during the year which has elapsed; as a review of cursory character and with the purposeful omission of detail. At the same time, I think that it will appeal to you as it has to me, that a survey of the activities of the Association through the work of its committees, its Council and officers, shows an astonishingly wide range of functions. The same thing will be true of each one of the component society groups if they are active and vitally interested in more than the day's work. There is to me, after my official experience, an amazing similarity between the functions of our society and those of our government; a similarity which grows all the greater as

we approach that capstone of our medical organization, the American Medical Association. The conclusion, if this be an appropriate conception of things, may be that we ask ourselves this question: Do we not require the same kind of ability and even training on the part of our official representatives as is needed in the government of the people? And also the corollary question: Is there not required of the membership at large the same deep and active interest, the same appreciative knowledge of what is being done for it by its representatives, as is necessary for truly successful popular political government? Without these things, what will become of democracy, either as an ideal or as a practical system of governmental control and management?

The attitude of both officers and membership, in an organization like ours, may conceivably vary between very wide limits. It may be narrow, concerned entirely with self-interest and it may have tomorrow as its horizon. The reasonable satisfaction which comes from personal success may express itself in a real solicitude for the good repute of the calling which made it possible and a sympathetic, truly practical concern for those colleagues whose lines have fallen unto them in less pleasant places. Such an attitude may bespeak an horizon which is so far away that it gives no present thought of anything less than the rainbow which it envisages. The beautiful ideal may seem, like the rainbow, practically unattainable; doubtless, it is so but it is an ideal so transcendent as to illuminate our lives and to give us something to live for and to strive for which is better than anything which we have. I am impressed with some words which have been said of one of our well known American philosophers and I shall take the liberty to quote them:

"Some philosophers look at life and see beauty; some look at life and see nature; some look at life and see themselves; some look at life and see other men."—(*T. V. Smith.*)

"Philosophy," Dewey has said, "recovers itself when it ceases to be a device for dealing with the problems of philosophers and becomes a method, cultivated by philosophers, for dealing with the problems of men."

I trust that I may be pardoned for calling to your attention the great changes which have taken place, in recent years, in the conditions under which our professional work is being carried on. I shall not attempt to analyze them; they are but a part of the change in the general picture of our civilization. Permit me, however, to stress the coincidental development of social science and the great advance in the science of Public Health. In this development of social science, the economic problems and those of health are inevitably and inextricably associated. The Public Health movement of our day owes its impetus and its continued existence to advance in the medical sciences. By the same token it is destined to grow. It is an avowed purpose of medical organization to foster and assist such growth. We could not hinder it, even were we disposed to do so. For generations medicine was a purely individualistic profession. It pertained almost entirely to activities of the individual physician in behalf of his patients, as individuals. It is my hope, as it is my belief, that this aspect of our calling will not lose in importance. On the other hand, it seems to me impossible to close our eyes to the fact that the social aspects of our profession are inevitably destined to loom greater in the scheme of our national life. Not, however, by legal fiat, but rather by virtue of the same scientific advances which have brought modern preventive medicine into being, together with all that this implies. This statement is, however, not to be taken as the earnest of a belief on my part that it must represent an approach to State Medicine, in the American meaning of that term. In Great Britain, the expression "State Medicine" is used to denote what we mean by governmental activity in behalf of the health of the people.

It is true that there have been some amongst us, even though very few, with the temerity to advocate downright state medicine. It is not necessary to specify what this means. The most important reason which has been recently advanced is the "venality of the medical profession" and particularly the venality of the specialists. One might be led to assume that specialists in medicine are made out of specialists in venality. The remedy proposed is to put the state in charge of the practice of medicine. That is to say, to put it into the hands of the politicians, who are so much less venal than the rest of us! In this way the "white collar man" may be protected from the exploitation of the venal medical profession and the hearts of multi-millionaire employers may be saved from bleeding in his behalf. Would it not be a good thing, while we are about it, to provide that before admission to a medical school the student should be obliged to take a vow of poverty and celibacy. This would make the profession attractive to the right kind of persons, only. Such would be saved from the temptation to seek large financial rewards and their only thought would be an altruistic devotion to the good of mankind. Of course, there is no logical reason why we should stop here. We may as well advocate a truly socialistic or even communistic order instead of the Republic. Surely an economic and professional status like that of the medical profession in Soviet Russia is something to which we should aspire!

I shall ask you to please pardon this satirical digression but the impulse was not to be resisted. It is a fact, however, that we are accused by some with taking a position of great inconsistency with respect to the utilization of the fruits of scientific accomplishment for the public good. It is said of us that we are guilty of standing back in the application of many of the products of scientific advance for reasons not exactly cred-

itable to us. It has even been said that there is a disposition on the part of the medical profession to be unduly critical of those of its own number who have devoted themselves to medicine in its socialized aspects. It would appear necessary to grant that at the present time social science and public health are inseparably associated and that, in consequence, Medicine, in its broad sense, has come to assume a most important part of the background of both of them. The acknowledgement by all serious students of the part which poverty plays in the causes of ill health, and conversely, of the role which ill health performs in the production of poverty is most significant to us. During the past twenty-five years, great steps have been taken in the development of social science. However little this might correspond to the theoretical definition of the sociologist himself, the chief purpose in his work at the present time is the improvement of the condition of the underprivileged and unfortunate; mainly, therefore, the poor. Poverty is the one outstanding factor of all the problems confronting the social worker today, just as its elimination would bring with it the solution of nearly all of them. I almost wish that I were one of those who have the happiness of believing, at least, that they know a means by which poverty might be removed from the world. Unfortunately, I am not willing to acknowledge the possession of even slight information which might lead toward such a solution. It is apparent to me, however, that in the attempt to improve the condition of the less fortunate, enormous stress has had to be laid upon the health problems which are involved. They have become so much more tangible in their nature by reason of scientific discovery and invention and principally in the medical field. Saying nothing of the hope which lies in future scientific progress, it would ill become any one who is acquainted with the present possibilities for preventing disease and the economic loss thereupon consequent, to undervalue the importance of sound health in the happiness and prosperity of the people. At the same time, it seems safe to say that under present conditions of economic adjustment, even though ill health were brought to an irreducible minimum, there would still be inaptitude, unemployment, dissatisfaction with labor conditions and rewards, not omitting improvidence and downright laziness. In other words, the poor would still be with us. Important as health conditions are in modifying the economic status of the people, they may not be considered the most significant factor. Extremely portentious, however, is it that in the field of public health and disease prevention there lies both enormous accomplishment and, as well, the promise of more, while the solution of the purely economic problems lags far behind. The social workers reach out for participation in the health activities, not only because of their attractiveness and the lure of real accomplishment, but also because in the purely economic area there is so little for them to do beyond extending relief in one form or another. A recent writer has aptly said: "It is clear that we have got to know a great deal more about psychology and sociology than we do now, keeping them 'ologies' and not making them 'isms.'"

Medical men must lead in the working out of problems whose chief aspect is medical; they must lead also in the practical application of the principles which have been laid down by medical scientists. It will not do for us to turn the utilization of medical achievement over to the hands of the social workers and then complain of the paternalization and pauperization which result therefrom. We can avoid such a contingency only by keeping the leadership in our own hands; a thing which is the easier to do since the medical profession is the necessary instrumentality, without which nothing can be accomplished. Neither will it do for us to assume a merely passive role. Society is bound to insist upon having the advantage accruing from the accomplishments of medical science, whether we will, or no. To attempt to thwart such a consequence would put us in the position of a Mrs. Partington, who strove to turn back the tide of the Atlantic Ocean from her door by means of her mop.

President Hoover has said: "Leadership is a quality of the individual. If Democracy is to secure its authorities in morals, religion and statesmanship, it must stimulate leadership from its own mass."

There is, to my mind, a distinct call in medical organization for the quality of statesmanship; of politics in its noblest, broadest and best sense. Of the statesman, James Russell Lowell has said: He "applies himself to the observation and recording of certain causes which lead constantly to certain effects, and is thus able to formulate general laws for the guidance of his own judgment and for the conduct of affairs. He is not so much interested by the devices by which men *may* be influenced, as about how they *ought* to be influenced; not so much about how men's passions and prejudices may be utilized for a momentary advantage to himself or his party, as about how they may be hindered from doing a permanent harm to the commonwealth." There seems much, to me, in these words to which we may well give heed. For the things with which we are concerned in this discussion pertain not simply, nor even principally, to us as physicians. They are of primary importance to the commonwealth of which we are a part. In this thought there lies hidden, moreover, another implication which has before now been brought to the attention of our profession, namely; that men like those in the medical profession should feel called upon to take a more active personal interest in general political activities, even as I am now urging this same thing in respect of their own professional organization.

Only thus can the standards be elevated; only thus may we be sure of going on, resistlessly, to better and ever better things.

In common with every man who has striven earnestly to serve well the cause to which he is so deeply devoted, I come to the end of my term as your president with a sincere sense of my shortcomings. The feeling of regret that it has not been possible to accomplish more, is painfully strong. The time has seemed very short, even as the consciousness of inadequacy has been ever before me. To my able, energetic successor I extend my best wishes and the promise of dutiful cooperation. To you, my colleagues, I can but repeat the words often used by European candidates in medicine, in former days, as a motto for their graduation theses: *"Feci, quod potui; faciant meliora potentes."* (I have done what I could; may better things be accomplished by those who have the ability.) 707 RACE STREET.

Inaugural Address of the Incoming President*

C. W. WAGGONER, M.D., Toledo

THE practice of medicine is the oldest of professions. And, if we try to find the indefinite story of its originators, we are lost in a haze of tradition and musty tomes from which too many times spring false accusation and destructive criticism. We differ from other phases of literary and scientific life as recorded by men in their times, in so far as we have had no Plutarch—who wrote about distinguished personages in classical times—no Smiles, who wrote Lives of Engineers,—no Ruskin, who wrote about artists and architects,—no Birkenhead who described the Great Jurists of England. "In all recent outlines of History and Science no mention of Hippocrates, Vesalius, Lister, Jenner, Virchow or Morton, and only a bare reference to Pasteur. Is it possible for anyone to contend that these men did not do more for the comfort, happiness and spiritual liberation of men and women, in short for civilization, than any number of Gregories and Tsar Peters and John Wesleys and Luthers and Albert Prince Consorts and treaties of Versailles and councils of Trent, all of which are freely spread over these pages?"

No great outstanding and connected history of the activities and achievements of the doctor of medicine has yet been written.

Art as applied to medicine has been developed through a very extended period. For a great many hundred years, perhaps thousands, the individual who applied the healing principle, had to grope his way as necessity demanded, and what a long trying time this must have been. From its very beginning up until four hundred years ago no science of any kind was established and correlated, and only in the last century was medicine placed on a basis which demanded recognition.

Scientific medicine began with the Greeks. The Greeks not only started scientific medicine upon its course, but also provided the substantial basic elements of our anatomy, physiology and pathology, and above all, perhaps, our conception of the bodily 'constitution', 'habit' or 'temperament'. It is from the Greeks that we derive almost all our medical nomenclature. When to this we add that our medical traditions are inherited through a direct and continuous chain from the Greek practitioners, it becomes evident that the debt that Medicine owes to this marvelous people is great indeed.

Now this debt has become associated with two or three great figures. The same Hippocrates, Aristotle, Galen, are familiar to all.

The story of the struggles of physicians throughout the ages to overcome disease and establish preventive medicine is one of great interest and great value in this day of so much material concern and self aggrandizement. Principles of medicine were not established in one age or in one country but by the inter-correlation of facts by medical men from all parts of the world through centuries.

The theory of medicine is the most important branch of science to which the human race must appeal to improve and perfect its methods for coping with the great social and industrial problems.

H. G. Wells has shown that there are four forces active in shaping of the development of civilization:

1. Awakening of free thought.
2. Awakening of free conscience.
3. Recognition of the solidarity of mankind in the writings of modern philosophers and teachers.
4. The recognition of the need of self discipline in every individual in the feeling of social obligation.

No serious study of the activities of medical men is necessary to establish that always have they conformed to all these and at least two more —that of altruism and self sacrifice. And so the gospel of the few developed, and it is the gospel of the few which will save the world.

There is no class of men on earth which has more toilfully assumed the responsibility of privilege and intelligence, more earnestly and more faithfully shouldered the burdens of the weak than the men of medicine.

*Inaugural address presented at the 84th Annual Meeting of the Ohio State Medical Association, Columbus, at the annual banquet, Neil House, Tuesday evening, May 13, 1930.

Surely here we find tragedy, romance and all the alluring details that go to make up a fascinating story of the ways of man. This record of progress of the doctor in all time covers the rise and fall of great empires and nations, revolutions in the social welfare of all peoples even great climatic and geological changes.

Cicero asked, "What were the life of man did we not combine present events with their predecessors in past time."

"The wisdom of today is based upon the knowledge of the past."

As we study the myths and traditions and here and there find a tangible mark in the sands of time we feel that something has been saved for our first documentary evidence just at the dawn of written things.

It may be that the oldest medical treatise extant written in Chinese several centuries before Christ indicates where and when written accounts of medicine originated, but that too is indefinite.

We might develop the scientific, social and political side of medicine in detail all through this period, through English, German, French and all other national attempts, but suffice to say that there always was progress, there always were new discoveries and these always with the thought in mind for the greatest good to the greatest number of people, unselfishly and magnanimously given.

About 1600 Descartes wrote: "If ever the human race is raised to its highest practicable level intellectually, morally and physically, the science of medicine will perform that service.

Although Copernicus, Vesalius and Chamberlin who lived about that time have gone down to the silent dust of voiceless age, yet they come to us today carrying with their unforgotten accomplishments a blaze of glory and an example unperishable. If there is a choice company of those who care they march forever in their ranks.

Those days the great problem of the doctor was to save his own life, today his self respect and individuality are at stake—which is the more priceless?

The writing and publishing of medical literature developed slowly and it was not until 1775, thirty-five years after the first medical school was established in Philadelphia, that John Jones published the first American Medical book. Since that day there of course have been many and legion in number.

All through time there has gone on a certain endeavor for supremacy, certain manipulations having in view changes and readjustment but always this has been in a fair and honest competitive way.

The accused has always had "his day in court".

Facts have been presented and honest rebuttal has been eagerly listened to.

The intent, past service, and character involved all have had their place in consideration of the case and of course all this is as it should be. There should be no wild hysterical clamor for the destruction of any party, trade or organization.

Whether endeavor of a party or a principle, a man or a movement be under consideration, the same rule should apply.

Right here let me say that I am perfectly aware of the lot that may befall an essayist or speaker who is searching out a cause and remedy for some of the conditions I will enumerate.

At this very time there are medical men going from convention to convention in this country, listening to some highly scientific subject while insidiously is being arranged by doctors (I am sorry to say) as well as outsiders, a scheme which may destroy completely the economic side and soon the scientific side of the practice they should care for so much.

In few societies and few meetings are there place and time for a discussion of the most serious of ailments that may befall an organization and a people, I refer to socialized-paternalistic medicine.

We hear so often that a profession that can claim a Hipprocates, a Chamberlin, a Vesalius, a Sydenham, a Harvey, a Hunter, a Laeunec, a Virchow, a Lister, an Osler and so many other who forgot themselves. For you know some men remember themselves and the world forgets, while other men forget themselves into immortality. Such a profession need not fear for its future.

We hear so often that a profession that can erase from the pages of its medical treatise the word incurable after such diseases as Paresis, Pernicious Anemia, Diabetes and a number of other conditions and immunize against most epidemics need not fear for its future. But let me say this to you, while the above was being accomplished and we were playing our great symphonies, raising the hopes of thousands, there has been burning a fire that it may be impossible to control.

Some doctors are pretty well satisfied, particularly if they are located in a thriving prosperous community with a well conducted medical society, and if they belong to a luncheon club and are friendly with the leading banker, they may even call such an essay undue alarm, they may even say all is well and we are safe. That kind of over-confidence has lost many a good cause and destroyed the morale of many a well directed defensive movement.

Let us examine this economic phase—this phase of the practice of medicine that a few salaried so-called uplifters, say is pauperizing the middle man and making wealthy doctors.

I have many times wondered what would become of some of these idealistic, theorizing promoters of inharmony if they had to get a competitive position and do real constructive labor.



C. W. WAGGONER, M. D., TOLEDO

President of the Ohio State Medical Association for the year 1930-1931

They tell us that this cost of medical care is about three billion five hundred million dollars per year.

Let us assume (and this is too high) that the doctors of the United States get one half of the amount, one billion, seven hundred and fifty million, there are 150,000 doctors in the United States—this would give each doctor $12,000 per year. We know some doctors take in more than this but how many much less.

I might enumerate many other complications in which are involved the economic side of medicine in the way of contract practice—industrial medicine—full-time, salaried professional men and women in tax maintained institutions in competition with the private practitioner; hospitals maintained by wealthy individuals; certain clinics moving from county to county, with the best possible thought in mind but falling short of accomplishment on account of improper contact with local doctors.

All we have ever asked is to be allowed to conduct our own affairs. A profession in which its members give twenty-four hour service—raises its own standards, individually and collectively—eliminates its own medical schools to one-half the original number so that its students would be better doctors, demands post graduate work of its members.

A profession that is always seeking higher requirements and nobler characters so that the public may be better protected.

A profession that cares for the charity of the world without question. A profession that invented philanthropy. A profession without which social uplift would long ago have been a lost cause. A profession through its service and hospitals has made possible the work of the missionary. A profession that gives one to the other, and to the world, discoveries that in royalties would make the holdings of Henry Ford look almost like "The Widow's Mite" (one cent per unit for insulin).

I think such a profession may well be left to its progress and accomplishments, and if anything it should be protected from the over-zealous, misinformed individual who if he had his way would soon socialize the whole of society.

Is a profession in which the average income of its members is less than $5,000 gross and it may be nearer $3,000, doing the things I have enumerated before, receiving too much money?

Is the music of the idealist's chant to be the funeral march of medicine?

No, I cannot think that even this is the end, I cannot think that even big business will absorb and control us entirely, although much evidence of such activity is at hand.

I hope we may develop a leadership that will have the simplicity to wonder, the ability to question, the power to generalize, and the capacity to apply, a leadership that will guide us aright, although the road leads through a part of society that raises the question of the so-called high cost of medical care and obstructs all legislation for preventive medicine and control of disease; a public, part of which at least, champions the cause of the uneducated, unreliable sects and pernicious profligate quacks who vent their spleen in divers ways, not the least being over the radio.

Do we often stop to think that if the few failed to pass on for a generation the painfully accumulated knowledge of the race, we should return to barbarism.

"Take five hundred names out of human history," says Dr. Wiggam, "and you have no history worth recording."

Take from medical science the work of the men I have mentioned and civilization would again find itself in a precarious state.

Let us return once more to the economic question.

"Family budgets have been long divided into five basic groups: food, shelter, clothing, light and fuel, and sundries. The first four are self-explanatory; the last group takes in everything else, including the doctor, the druggist, and the hospital. It is quite obvious that the items included in the sundry class have been multiplied many times in the past twenty years. Thus at the present time, with the sum allotted for medical care one also purchases radios, telephones, movies, cosmetics, autos, cigarettes, and a thousand other comforts and luxuries that were unheard of not so long ago. Not that one blames the general public. Even the most prejudiced must admit that the moving-picture cathedral leaves the hospital at the post in the matter of exotic surroundings; that one can't go touring about the country in an appendectomy, and that one golf stroke is worth two of those of a paralytic nature."

"The relative proportion allowed for medical cost has constantly grown smaller; while actually the need and the cost have both increased, if not as much as is alleged, at least in the same ratio that other things have. In one typical workingman's budget, I chanced to examine, it was interesting to note that the sum allowed for tobacco, soft drinks, and candy, was three times that for medical expenses. Here is shown clearly a confusion in the sense of values."

"The answer to the problem, as given in the *American City* for November, 1927, is that " 'more free hospitals and free clinics are urgently needed.' " This in spite of the information given in the *Literary Digest* of June 30, 1928, that the physicians of Denver donate one million dollars' worth of their services annually, and in spite of the fact that in another mid-west city of 350,000 population the doctors perform gratis one-and-one-half-million dollars' worth of medical work annually that can be accurately calculated and another half-million estimated. In the same city twenty per cent of the babies born see the light

of day for the first time in one free hospital, and more than fifty per cent of all babies are attended in a baby-welfare clinic where the services of the doctors (but not those of the social workers) are given free. In this same benevolent and charitable city a survey shows that the doctor actually collects thirty-five cents for every dollars' worth of medical service given."

"Ethics, not medical but plain garden ethics, naturally prevent any reputable physician from proclaiming in the newspapers or magazines that his particular brand of appendectomy, diabetic treatments, or itch-remedy outdistances all others in its perfection. We just don't do it. What we have done though, through public health education, tuberculosis campaigns, periodical medical examination propaganda, etc., is to increase the demand for our services. This is not anly ethical but is justifiable, and it does inestimable good in conserving the public's health. By the very same means we may have increased the bill for medical service but have neutralized that by preventing sickness. Therefore, if our educational program is effective, then sickness should decrease and this means even less income for doctors, who are still using the commonly enough condemned installment plan, which as far as I can see, was invented by physicians generations before merchants ever heard of it. And we do not charge interest on deferred payments, either."

"That doctors' fees have risen in the past ten years I think is generally not true. I do not feel that the fees are exorbitant, nor do I feel that they could be lowered without receding further from the minimum income figure necessary to insure the doctor the sort of living to which his investment in time and money entitle him. I am very firm in the conviction that an increase in the free work would give no permanent relief, the opinions of social-service workers to the contrary notwithstanding. To the advocates of State medicine I can only point out that the Veterans' Bureau spent in 1927 to care for a small fraction of the 5,000,000 men who were in France $570,000,000."

PUBLIC HEALTH

A great part of our modern social evolution is concerned about public health, our communities are interested, a part of the public generally of course is interested, this shows a very commendable trend of education in our time, but if we examine closely I think we may find something happening that is not entirely conducive to the greatest accomplishment. I refer to the multiplicity of agencies operating under the guise of so-called health units or organizations.

Far be it from the essayist to deny one deserving person any help he may receive from any one, but when two or ten organizations with much individual overhead and many offices are trying to do the work that one properly centrally controlled organization should do then there surely is loss of important time and material somewhere.

The organized profession of any state is the fundamental agency of that state, all other official organizations are a part of that organization—the doctors understand this and expect support and guidance, as they should.

When the greatest amount of good is accomplished, it will be through the harmonious cooperation of the official health agencies with the doctors themselves.

The doctors are always eager to exchange ideas and learn new principles. This may be well observed at medical meetings, etc.

Doctors will go long distances to hear some one in whom they have great confidence, they will direct their patients to a consultant in whom they have faith.

So when we find this almost universal unrest; when certain clinics or activities are about to move into a community, we should at least try to analyze and find the cause. Has there been a breech of confidence? Has there been some time an attempt at coercion? Is some one over-stepping the bounds of the field of his activity?

Let us be honest in our investigation.

Let us criticize constructively.

Let us remember that every doctor is first a doctor and then he may become a health officer, that the only great good he may accomplish is by the sympathetic harmonious relation he holds with the practitioners of medicine and his county, state, and national medical societies.

In conclusion I must quote Dr. Harry Hall.

"I feel as I end it, like the ghost at a feast. To arraign even lovingly the faults and failings of the profession we venerate breathes the air of ungratefulness. There is something unpleasant about the actor that plays the character of filmy nothingness. The part calls for a stalking grimness, a seeming lack of substance, a cold clamminess and always one must be pointing—always pointing—at the foibles of the other guests, with a sort of bony finger from a hand that none can grasp. But ghosts have slain their MacBeths—although not directly.

"So I believe the several things I have related, to have some part in our unrest. My judgment is anything but infallible, but there the matter rests. To us, the man to be feared is the one who says, "always with a smile", that all our ills will eventually right themselves. To us, he is an incubus.

"We may see state medicine, although I hope not. We may see our hospitals, our work and our followings taken from us and controlled by large units. But I hope not.

"It appears to me that we alone seem to understand the meaning of humanity. In modern dramas and in present day literature it seems to me that it is the medical man when he appears

who alone has a great compassion and understanding for all the other characters.

"Picture a world if you can where all the doctors of today, ministering as they are at this very hour, were suddenly eliminated, and in their place were machine-like personages that sought from files and indexes the precise methods of approach, with personality eliminated. It is unthinkable. When the crucial time comes, if it ever does, I feel that the great medical solidarity will be found with capable leadership in the perfected organization of a greater and more unified American Medical Association; that industrial interference will come and go; contract practice appear and disappear, and state medicine attain a growth only to sicken like a weed. Medicine is too old a custom for anything to long stop its progress, arise what may, for nature and evolution, progress and civilization have embraced medicine as a brother of their blood. You can no more block it now nor change its destiny than you can that of existence. Medicine has become a very member of the integral body of life itself. The martyrdom of all the great figures of its past has seen to that.

"Unfaithful as some few of its followers may be to the meaning of its finer truths, all will subscribe to its authenticity. To those who have embraced it, some sense of immortality surrounds it.

"Hardened as any doctor may become to its altruistic prophecies, he never seems to lose a clinging sense of its subtle proofs of somewhere having a great destiny. What else can so subscribe? I know of nothing. So on this rock we found our hopes and yearnings. What happens, back we will come, stronger, more vibrant, more invincible, more powerful than ever, led, it may be, by some great voice from amongst us filled with the intense clairvoyancy of Descartes, and proving that he was right when he said:

"If ever the human race is lifted to its highest practicable level intellectually, morally and physically, the medical profession will perform that service."

VALENTINE BUILDING.

—Federal and state authorities have started an intensive campaign toward eradication of tubercular cattle in Ohio. About 1,500,000 cattle are under direct supervision. Forty-nine counties are recognized as having herds which are less than five-tenths of one per cent infected.

State Welfare Director Griswold has worked out a limited program for providing psychiatric examinations for inmates of the Ohio Penitentiary. The examinations, to be given by superintendents of the state mental hygiene institutions, are intended as a guide to the proper treatment of criminals and to aid the Board of Clemency in determining the advisability of granting paroles to certain penitentiary inmates.

Data on Diabetes

Continued increase in the deathrate from diabetes in the United States and the fact that the deathrate from diabetes is considerably higher in this country than that prevailing in Europe have led the Metropolitan Life Insurance Company to make a comparative study of the disease, revealing some interesting conclusions.

It was found, according to the *Statistical Bulletin* of the Metropolitan that the deathrate from diabetes in the United States is more than 50 per cent higher than that in England and Wales and that this difference exists at every age period, being distinctly greater at the older ages where the level of the deathrate in this country is practically twice as high as in England.

However, the general trend of the diabetes deathrate from 1920 to 1928 was found to have been the same in both the United States and England. The rate was on the increase when insulin was discovered in 1922, it is pointed out, and in both countries there was a decrease from a former maximum deathrate in 1922 to a minimum in 1924, followed by a gradual rise in the succeeding years. Both countries recorded new maximum deathrates in 1928.

The increase in the diabetes deathrate in both countries is confined to the older age periods, a substantial decrease having been noted in the younger ages, up to 45 among males and 35 among females, the *Bulletin* says. Between the ages of 35 to 54 among women and 45 to 54 among men, the rate has been practically stationary with relatively slight declines, the study showed.

The following similar factors underlying the trend in the diabetic deathrate in the two countries were discovered, the study points out:

1. Insulin shows its greatest value in the treatment of diabetes at the younger ages.

2. At the older ages, diet is still by far the most important factor in the treatment and although insulin is extensively used in treating these persons, it is of relatively less importance than in the treatment of younger persons.

3. The number of known cases of diabetes is growing, due, in part to more frequent discovery through routine urine examinations.

4. More and more, diabetics are surviving to advanced ages and are dying of the degenerative diseases that characterize this period of life, the deaths in most cases, however, being charged to diabetes.

5. In the use of insulin itself, there are two factors operating against its success: First, a false sense of security which insulin gives to diabetics; second, aversion to the continual hypodermic injections, which so far, is the only successful method of administration.

The Heart Problem

WILLIAM MUHLBERG, M.D., Cincinnati

RECENTLY, on becoming associated with the Cincinnati Heart Council, it occurred to me that it might be interesting to review the experience of Life Insurance Companies, with especial reference to the heart problem.

Heart disease is now the leading cause of death, taking precedence in the past decade over pneumonia and tuberculosis and accounting for almost 200,000 deaths annually in the United States. There can be no question of an increase in the number of persons dying annually of heart disease. Since, however, the expectancy of life is likewise increasing steadily, it is of course possible that the increase in the number of deaths from heart disease may simply indicate the survival of persons into the ages where heart disease is more likely to be a fatal issue. It is necessary, therefore, to study the problem, not from the viewpoint of the actual number of deaths, but rather from the viewpoint of the number of deaths from heart disease per thousand of population for each age period.

Furthermore, since Heart Councils have been organized in various cities for the purpose of reducing the heart mortality, it is essential to know what procedure would be most effective in preventing the disease. The term heart disease is of course a generic one, but for the purpose of prevention, heart disease may perhaps best be classified in relation to the etiology, rather than the morbid anatomy or even the pathological diagnosis. It is commonly assumed that etiologically heart disease can be classified into:

(1) Congenital cases.

(2) Those developing as a rule before the age of forty, due mostly to rheumatism, tonsillitis, chorea, and perhaps other infections, such as scarlet fever, etc.

(3) The syphilitic group, developing particularly between the ages of 30 and 50 and manifesting itself usually as disease of the aorta, aortic valves, or coronary arteries.

(4) Thyroid group.

(5) The degenerative heart cases, developing mostly past the age of 50 or 60 and including a motley assortment of such diseases as arterio-sclerosis, myocarditis, valve defects, coronary artery disease. This form is generally viewed as being in reality cardio-renal-vascular degeneration.

Difficulties arise in connection with the collection of statistics in the cardio-vascular-renal types, inasmuch as it is not always easy, without a postmortem, to decide whether the death was purely cardiac, or secondary to a kidney involvement, or due to arterio-sclerosis, resulting in apoplexy or other cerebral vascular impairment, or a coronary artery disease.

It is evident, that if Heart Councils direct their activities solely towards the prevention of the rheumatic forms of heart disease, the results will be rather discouraging, unless it can be shown that this class must be held accountable for the increase in heart mortality. Furthermore, it is very probable that any effort to reduce the incidence of heart deaths past the age of seventy or seventy-five will not be very fruitful of results, for the reason that deaths past this age can most readily be ascribed to a general senile breakdown in the body function, and therefore, not likely to be influenced to any degree by preventive measures.

The real problem, therefore, it seems to me, is to ascertain first, whether there is actually an increase in heart deaths, and if so, whether the increase in heart disease is due to an increase in the rheumatic form of heart disease; whether it can be ascribed to syphilis; whether it is solely due to senile degeneration, or whether perhaps other factors must be reckoned with.

Statistics, unfortunately, do not always clearly indicate the etiological relationship, but the deductions from insurance data would seem at least to show that heart disease resulting from rheumatism, etc., is not on the increase, and that heart disease due to syphilis is probably not as important an element as is commonly supposed; but that in all probability, the increase in heart disease is due to other causes operating at the older ages, among which high blood pressure appears in many cases to be a preliminary symptom.

Available statistics gleaned partly from Census Bureau sources, but principally from insurance mortality studies indicate:

(1) That there has been, in the past ten years, before the age of 35, a very slight decrease in deaths from heart disease, but after the age of 35, there has been an increase, slight at first, but accelerating rapidly so that at age 75, the mortality rate per one hundred thousand has doubled, and past 75, almost trebled. Since the heart deaths at the earlier ages are principally rheumatic, it is evidence that some progress is being made in the prevention, very likely through better housing conditions and occupational environment and possibly through school inspections and operations on diseased tonsils.

(2) The relationship between rheumatism and heart disease is clearly shown by insurance mortality investigation of persons giving a history of

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President of the Heart Council of Greater Cincinnati.

having had rheumatism, but in whom the hearts were found normal when insurance was issued. In such cases, where there were one or more attacks of rheumatism within five years of the insurance examination, the mortality was found to be 20 per cent in excess of the normal and the excess mortality was due principally to heart disease. But where there was no history of recurrence of rheumatism in five years, the death rate was practically within normal limits.

(3) Insurance applicants who had on examinations, systolic apical murmurs, but with little or no hypertrophy and good compensation, showed almost constantly an excess death rate of 75 per cent above the normal expected. Where, in addition, the heart murmur existed with a past history of rheumatism, the excess rate was 100 per cent above the expected average.

(4) Apparently almost one half of persons showing slight systolic apical murmurs and diagnosed as probably organic have in reality functional murmurs. In 1927, our examiners rechecked the hearts of persons, age 39 or less, previously reported as having murmurs, and in over one half failed to confirm the previous diagnosis. These cases represented about 195 out of 100,000 risks examined. Past the age of 40, however, failure to confirm murmurs was only at the rate of 45 per 100,000. A murmur found at older ages is more likely to be really organic.

(5) The insurance statistics of one large company on the relation of syphilis covering some 2400 cases studied over a period of about 20 years, where treatment, probably mostly mercurials, had been carried out for two years and where there had been freedom of symptoms for at least a year, showed a death rate of about 35 per cent above the average and rather curiously, the excessive death rate was due entirely to paresis and locomotor ataxia—the heart deaths being only slightly above the expected average. But where there was a history of syphilis combined with an occasional alcoholic excess, the mortality was 135 per cent above the expected average, and there was a very heavy death rate from heart disease and cirrhosis of the liver. The results are somewhat startling and suggest further study.

(6) The relationship of overweight to heart disease is an interesting one. Even at the younger ages, 15 to 29, deaths from heart disease are commoner among overweight than underweights. The disproportion becomes more marked with increasing age until at ages past 45, the death rate from heart disease amongst policyholders who weigh 50 pounds or over above the average, is about 38 per 10,000 as compared with 20 per 10,000 for normal weights, and 13 per 10,000 for light weights. Since these figures parallel very closely a similar experience for the relationship of overweight and Bright's disease, it is quite evident that overweight is a frequent cause of cardio-renal diseases, very probably due to excessive consumption of food.

(7) *Glycosuria.* It has been the practice of Insurance Companies to accept very guardedly applicants who show traces of sugar in the urine either at some time in the past, or who show a trace of sugar in one out of three samples at the time of making application for insurance. A study of this group reveals a high death rate from organic heart disease—more than twice the normal. As might be expected, the rate from diabetes is also very high—about six times the normal. No doubt, the excessive heart deaths can be ascribed to the arterio-sclerosis, which so frequently develops in diabetics.

(8) *Albuminuria.* In spite of the large volume of figures that Insurance Companies possess, giving the experience of companies in relation to albumin, or albumin and casts in the urine, no especial study has been made of heart deaths in connection with this impairment. At the younger ages, intermittent albuminuria apparently is of little importance, but past the age of 35, even a trace, especially when constantly found is accompanied always with a high mortality ratio, particularly from Bright's disease, and since Bright's is usually an expression of cardio-vascular-renal degeneration, I have no doubt that the heart deaths will closely parallel the deaths from Bright's disease.

(9) It is interesting to note the relationship between cardio-vascular-renal deaths and large amounts of insurance carried. Almost uniformly insurance companies have a high death rate among heavily insured persons in spite of more careful selection and more rigid examinations. The larger policy-holders are subject to the worries and anxieties of heavy business responsibilities and the increased mortality among them is principally due to circulatory and renal causes —averaging, at ages over 45, in a study made by Dr. Symonds, about 14 per cent more circulatory deaths and 30 per cent more Bright's disease. The suicides were almost three times the average rate.

(10) *High Blood Pressure.* Of all the predisposing factors leading up to deaths from heart disease, high blood pressure appears to play the most important role. Practically 2 per cent of all persons applying for insurance show an increased systolic blood pressure of 15 mms. or over, above the average. Even slight elevations of blood pressure are accompanied by excessive mortality. Thus, an increase above the average of from 10 mms. to 24 mms. systolic shows an excess mortality of 69 per cent;of 25 mms, to 34 mms., an excess of 100 per cent; of 35 mms. to 49 mms., of 145 per cent, and 50 mms. and over, of 291 per cent. One company which issued insurance to about 600 applicants who were first class insurance risks in every way except for increased blood pressure, averaging about 30 mms.

above normal, suffered a mortality experience of over 100 per cent above the expected average among the group; 211 out of the 600 died at an average age of 55 years and at an average exposure of 6 years after the policies were issued. Of these 211, there were 145 deaths or 69 per cent due to cardio-vascular-renal disease and 55 were tabulated as heart deaths. This represents about five times the average heart death rate.

(11) Where heart lesions have been found to exist among applicants for insurance and where policies have been issued with an extra rating on account of the impairment, many insurance companies have experienced a very favorable mortality among this group for a period of two or three years after issuing the policy. Since these lesions were found mostly in persons previously unaware of any heart disease, it is evident that the detection of the lesion had a favorable influence on the mortality because of medical advice given to them by the companies or by their family physicians.

It would appear, therefore, from this statistical study that:

(1) Deaths from heart disease are increasing past age of 45, but not before that age.

(2) Deaths from heart disease past age of 45 are probably mostly of the degenerative type.

(3) Syphilis, when thoroughly treated and where care is observed as to subsequent habits, etc., causes fewer heart deaths than is ordinarily assumed.

(4) Important predisposing causes of degenerative heart disease are high blood pressure, overweight, glycosuria, albuminuria, alcoholism, and business worries and anxieties.

(5) Much can be done in the way of prolonging life by proper medical supervision, where heart disease is diagnosed in its incipiency.

Assuming therefore, that heart disease of the degenerative type is often a terminal affection resulting from the predisposing causes indicated which operate perhaps through the medium of arterio-sclerosis, it would appear logical, if effective measures are to be taken for the reduction of heart disease, that an early diagnosis of the disease itself and a correction of conditions known to predispose to heart disease offers the best means of reducing the mortality.

These methods have apparently been successful in reducing the mortality from tuberculosis. In spite of the fact that we have as yet no specific treatment for tuberculosis, the death rate has been reduced 60 per cent in the past 20 years, through early diagnosis, more rational treatment and adjustment of conditions that predispose to the disease—namely, improved housing conditions, better wages, and food. Very likely, natural selective immunity has played some part, but the improvement in the death rate has been too rapid in recent years, to assign this as a major role. Besides, Insurance Companies have learned, somewhat to their cost in connection with sickness and disability claims, that while the mortality rate of tuberculosis has shown marked improvement, the morbidity rate has not kept pace.

We are furthermore confronted with this peculiar situation, that measures for the improvement of public health are most likely to be successful provided that method does not entail too much initiative or effort on the part of the individual. Little progress was made in eradicating typhoid, so long as we appealed to the individual, but when the sources of infection, the water-supply, etc., were corrected, typhoid fever as a cause of death, began to wane. So in tuberculosis, the improvement in housing, wages and food, were brought about, not through the active participation of the individual, but rather through changes in statutes, change in economic conditions, etc.

It is this fact that makes the heart problem so difficult. An early diagnosis and early treatment are undoubtedly of value, and the predisposing causes of heart disease,—namely, overweight, glycosuria, albuminuria, syphilis, alcoholism, thyroid disease, high blood pressure, and perhaps focal infections—are easily diagnosed and are amenable to treatment, but the real difficulty is encountered in inducing persons to take the initiative or to display proper interest in the matter. The real solution is, of course, the annual health examination, but the real problem is to induce persons to undergo such examinations.

Propaganda, personal appeal and education may help, but the most effective measure is to bring the examination to the person examined and not expect him to make the initial step. Insurance Companies have difficulty in inducing 10 per cent of their policyholders to undergo annual examinations free of cost, but we have found in Cincinnati, that if the invitation is carried directly to the person in his office or factory, that over 50 per cent will volunteer. The examination must not only be a thorough one and done with due regard for the rights of the persons examined, but it must also be conducted with due regard for the ethics of the medical profession at large and with the hearty cooperation and approval of the profession.

The method of procedure adopted by the Heart Council of Greater Cincinnati was as follows: We decided to examine 1,000 persons, aged 30 or over, engaged in clerical work; the examination to be made without cost to the individual, by a physician not engaged in active practice but skilled in physical diagnosis; the scope of the examination to be about the same as a careful insurance examination, with especial reference to the heart and the predisposing causes mentioned above. Furthermore, the examining physician was not permitted to treat any of the examinees, nor was any examination to be made if the examinee was already under a doctor's care, and where an

impairment was found, a full report was made to the examinee's physician. Under no circumstances was any information given to the employer.

We approached presidents of various banks, corporations, etc., and readily gained their permission for conducting the examination. An agreement setting forth our aims, purposes and method was then printed and circulated among the employees, who were asked to sign the request for the examination. The consent was obtained from at least 50 per cent up to 80 per cent of those solicited. We have not as yet tabulated our findings, but a superficial survey of the 1000 whom we examined showed that:

About 1.5% had albuminuria
" 1.8% " glycosuria
" 13.1% " high blood pressures
" 13.1% " low blood pressures
" 5 % " definite heart murmurs, some of which may have been functional.

Quite a few had cardiac enlargement and we asked these cases to submit to further *X*-ray and fluoroscopic examinations at our expense. We hope to study these cases through a period of five or ten years by medico-actuarial methods, so as to determine the ultimate mortality.

I believe that this survey proves quite conclusively that such examinations are of value in discovering incipient disease and impairments that are prone to lead up to heart disease. Some of these impairments are unquestionably remediable in their incipiency. Furthermore, it demonstrates that persons are not adverse to medical examinations, provided the approach is made in the right way. We eventually hope to convince corporations and large business firms that such examinations of employees ought to be made annually at their own expense.

It is not improbable that if, through approach to corporation and business executives, we can induce several thousands to undergo these examinations, and if such examinations are shown to be of real value, the people at large will begin to manifest some interest and very likely will follow suit. After the vogue is once started, it will not be difficult to secure converts. It is not easy to start a fashion—as all advertisers known—but once started, it becomes a habit and then the major problem is solved.

3439 CORNELL PLACE.

DISCUSSION

I. C. RIGGIN, M.D., New York: I feel that we are most deeply indebted to Dr. Muhlberg for his able presentation of the problems of heart disease. He has certainly touched upon many phases of the questions which give us food for thought.

Unquestionably, those of us who have dealt with statistics in relation to heart disease have many times been puzzled as to the accuracy of the final analyses of such statistics. This has been due in a great measure to the fact that in the past no universal nomenclature or criteria for the diagnosis and classification of heart disease has been used. Of course, we must admit that often times it is difficult to state definitely the etiological factor as a cause of death in heart disease unless it is confirmed by postmortem examination.

Without considering the congenital or functional side of the question as related to heart disease among school children, we know that the most common cause of heart damage among children is from rheumatic heart disease. The question is brought out by Dr. Muhlberg that when one or more attacks of rheumatism occur within five years following an insurance examination, the mortality was found to be 20 per cent in excess of the normal and that the excess mortality was due principally to heart disease, but where there was no history of the recurrence of rheumatism within five years, the death rate was practically within normal limits.

It seems to me that this opens up a field of research in the study of rheumatic heart conditions in which an endeavor should be made to ascertain whether there is an allergic factor which might simulate an attack of rheumatism without causing any definite heart damage.

In the past we have considered and efforts have been directed in the public health field towards the question of underweight not only in the child, but in the young adult. From the figures quoted by Dr. Muhlberg it is evident that overweight plays as important a part, if not more so, than underweight in causing mortality from heart disease; it also affects mortality rates from other diseases. This increase in mortality from heart disease, with overweight as a contributing factor, may be due not only to increased consumption of food, but lack of exercise, improper rest, etc.

It has been stated that high blood pressure or hypertension plays the most important role as the cause of mortality from heart disease and when we stop to consider that about two out of every 100 persons applying for insurance show a systolic blood pressure of 15 mm. or over above the average, it is rather astounding. It would be interesting to note the records of the insurance companies showing the increased blood pressure by age groups. It would also be interesting to note the types of persons showing this increased hypertension—whether those having been athletes show an increased mortality over those who have led more or less sedentary occupations, and whether those with a renal or cardio-vascular complication predominate in the athletic or sedentary groups.

It seems to me that too much stress cannot be placed upon the fact that if we are to lower the death rate from heart diseases our efforts must be directed toward proper hygienic living, the early discovery of damaged heart conditions, and proper and adequate medical supervision thereafter.

Dr. Muhlberg is to be commended for the work being carried on by the Heart Council of Cincinnati, especially in relation to the examinations of 1,000 persons, age 30 or over engaged in clerical work, and when the report of this work is finally completed we will have information which will be of immense value in formulating future programs for the prevention of heart disease.

Persons injured while doing jury service are eligible to receive awards from the Ohio Workmen's Compensation Fund, the Ohio Supreme Court has ruled. The court contended that a juror is not an officer but is "in the service of the county under an appointment for hire".

The Post-Partum Cervix

L. E. LEAVENWORTH, M.D., F.A.C.S., Canton, Ohio

IT is the duty of the obstetrician, not only to successfully deliver the baby, but also to restore his patient to perfect health. This requires careful management during the patient's convalescence, not only in the hospital, but for the several weeks following her dismissal. We do not intend to discuss the various complications which may develop in the early post-partum period, nor the precautions which must be taken to restore the uterus to normal size and position. We are concerned only with certain pathological conditions which may be found in the uterine cervix on late post-partum examination.

Every obstetrical patient should have a thorough pelvic examination about six weeks after her delivery. This examination should be made on an examining table and should consist of a bi-manual palpation, followed by a careful inspection with a speculum. Many conditions which may not be felt by an examining finger will show very plainly to the eye. We mention this point because we have frequently found pathology in the cervix which had been overlooked because the patient's final post-partum examination had been made in the home. Careful attention should be given to the vulva, perineum, vaginal canal, cervix, fundus, both fornices and rectum. There may be evidence of relaxations (rectocele or cystocele) prolapsus of the uterus, retroversion with congestion of fundus, inflammations of vagina or cervix, lacerations of cervix, congestions, masses or tenderness in fornices.

We intend to limit this discussion to the various pathological conditions that may be found in the cervix and the pelvic congestions associated with the cervical disease. Beginning with some of the minor pathological conditions, found usually in primiparae, and progressing to the more severe cases of cystic and ulcerative endocervicitis, both with and without lacerations, we wish to show the results that can be obtained by office treatment with the electric cautery. We have been using this method of treatment for the past six years and the types of cases selected have been taken from a series of about one thousand cauterizations. A large number of these cases were patients who came for gynecological care, several months or years after the last childbirth. They are interesting in this study, to show the late results of negligent post-partum care and the effect of the electric cautery on more advanced cervical disease.

These patients often have a distressing group of symptoms that are quite characteristic. Immediately post-partum there is frequently a subinvolution of the uterus. In the more advanced cases the patients complain of soreness, heaviness, and bearing down in the entire lower abdomen. There may or may not be distressing leukorrhea. Menstruation is often irregular and profuse with a definite prolongation of the menstrual period. The patients suffer with weakness, lassitude, extreme nervousness and sometimes insomnia. There is usually backache, headache and constipation. The patients say that they have been in poor health for some time, that they are gradually growing worse and are discouraged and depressed. Examination shows a fundus that is large, soft and boggy, and usually somewhat retroverted or prolapsed. There is tenderness over the fundus often extending to one or both fornices. There may be congestion in the fornices, broad ligament, tube and ovary. The lips of the cervix are everted and ulcerated and often studded with mucous cysts. The cervix may be several times its normal size. The ulcerated area is usually covered with a mucous or muco-purulent discharge. We have found that the correction of the cervical diseases will often cause the associated congestion in the fundus and fornices to disappear. The menstrual function will be restored to normal. The symptoms will gradually subside and after two or three months the patient will say that she feels better than for several years past. The eversion and ectropion is corrected, the ulceration, cysts and leukorrhea disappear and what has appeared to be a badly lacerated cervix becomes a fairly normal multiparous external os.

Even after the most normal and uneventful obstetrical case, we often find a cervix that is not in perfect condition. Digital examination may show no abnormality but the speculum will reveal a condition as in Fig. No. 1. The external os is rather more patent than normal with an eversion of the interior lip and a slight hypertrophy of the mucous membrane, giving the appearance of a small bilateral laceration. There is usually some thick muco-purulent discharge at the external os. Linear cauterization of this hypertrophied area, as shown in Fig. No. 2, will give us, at the end of six to eight weeks, a cervix of perfectly normal appearance with no discharge. (Fig. No. 3). This type usually gives us no symptoms, but, if left untreated, may develop into the more advanced type mentioned above. By finding and treating these early cases of endocervicitis which often date back to the ante-partum period, we protect the cervix and save the patient a great deal of ill health in later years. It is probable that the neglect of these early cases increases the number of cervical carcinoma, as an end result of the other types of severe cervical disease.

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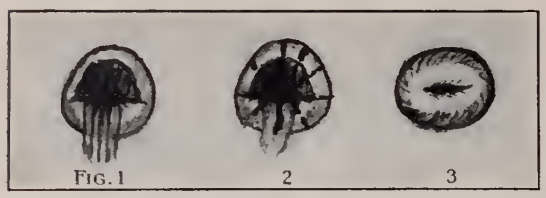


PLATE No. 1

Fig. 1—Mild hypertrophic endocervicitis with eversion of anterior lip and mucous discharge. Fig. 2—Diagram of lines of cauterization. Fig. 3—Result obtained two months after cauterization.



PLATE No. 2

ig. 4—Mild case of ulcerative endocervicitis. Fig. 5—Lines of cauterization are heavy black lines. Dotted lines show area of slough. Fig. 6—Final result after two months —one cauterization.

The technique of the cauterization is as follows: Linear cauterizations are made with a fine cautery tip, as shown in the illustrations. They are about one-eighth to one-quarter inch apart at the outer rim of the cervix, converging to the external os. The depth of the cauterization varies according to the amount of hypertrophy. The exact technique for each individual case can only be ascertained after experience. At first it is best to cauterize lightly and repeat the treatment if necessary. After some experience the operator will learn the best procedure to follow in the different types of cases. At the end of the treatment an anterior and posterior and two lateral cauterizations are extended well up to the internal os, to destroy infectious foci in the cervical canal. The patient is warned that she may have considerable discharge of foul odor and possibly some spotting. She is told that she may take a small cleansing douche of plain water or saline solution once daily. She is instructed to be rather quiet for several days and to return in two weeks.

At the second treatment the cervix is thoroughly cleansed with a ten to twenty per cent silver nitrate solution and any slough is removed. The cervix is again examined three or four weeks later, at which time it is determined whether further cauterization is necessary. The more severe cases require two or three cautery treatments at intervals of about two months. It takes at least eight weeks to get the complete result of a cervical cauterization. In many of these cases no local anesthetic is necessary. Occasionally we use a four per cent cocaine solution and in a few instances have given a little nitrous oxide and oxygen to patients of very neurotic temperament. The best time for this treatment is a few days after a menstrual period. In the milder cases the work is often done at the sixth week post-partum examination. In the severe cases, if there is no sub-involution demanding immediate relief, the work is often deferred for a month or six weeks. If the cauterization immediately precedes the menses, the menstrual bleeding is sometimes difficult to control and the period may last for two to three weeks. When the work immediately follows the menses, considerable healing has taken place before the next menstruation begins.

What is the effect of cauterizations on subsequent labors? When properly done it does not cause scar formation or interfere with the dilation of the cervix. This fact has been established by actual experience. We will give one illustrative case:

Mrs. K., primipara, age 28, was delivered of a baby February, 1927, after a 14-hour labor; low forceps preceded by a small episiotomy. The cervix was cauterized two months post-partum for a mild hypertrophic, ulcerative endocervicitis. In January, 1929, this same patient was delivered normally after a 4-hour labor. At the sixth week post-partum examination the cervix was found to be in perfect condition. In this case there was no necessity for cautery treatment after the second labor.

Occasionally there will be a slight recurrence of the endocervicitis which can be cleared up with one cauterization. In our experience the cautery does not cause the distocia which is often produced by a surgical repair.

It is interesting to compare the results of office cautery treatments with those following routine trachelorrhaphy. We frequently see patients who have had a repair of the cervix, who have a return of their leukorrhea and cystic endocervicitis several months or years following the operation. The reason is apparent. The routine repair of the cervix does not eradicate the entire diseased area any more than clipping will remove infection from a diseased tonsil. The only surgical procedure which will cure advanced cervicitis is a partial amputation or coning out operation of the Schroeder or Sturmdorf type, so as to enucleate all of the infected glands. We believe that cauterization is a more effective cure of cervical disease than the ordinary trachelor-



PLATE No. 3

Fig. 7—Advanced ulcerative endocervicitis with eversion and cyst formation. Bilateral laceration. Fig. 8—Diagram of lines of cauterization. Dotted lines show area of slough.

rhaphy and that it is the best treatment for a patient in the child-bearing period; that surgery should be deferred, if possible, until a more extensive operation can be performed. Furthermore, if any surgery is to be done on a diseased cervix, that does not include removal of all the infected tissues; that this repair work should be preceded by office cauterization. This preparation gives us healthy tissues with which to work and a much better result will be obtained. The surgeon will be saved the mortification of sloughing sutures and poor union of the repair. Thus the cautery may be used not only as a substitute for surgery, but as a method to prepare the surgical field.

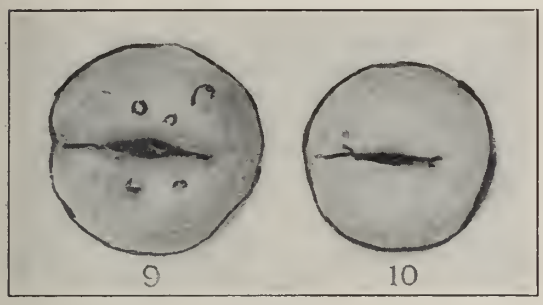


PLATE No. 4

Fig. 9—Cervix in Fig. 8 two months after first cauterization. Fig. 10—Same cervix two months after second cauterization.



PLATE No. 5

Fig. 11—Very much enlarged and cystic cervix. No ulceration or discharge. Fig. 12—Diagram of first cauterization. Fig. 13—Same cervix as Fig. 11 six months later, after three successive cauterizations.

It is difficult to realize the results that can be achieved by office cauterization. The illustrations accompanying this discussion can only show in a small measure the changes that are produced in the diseased cervix. We do not wish to put much stress on the cervix as a focus of infection, but in a few cases we have had patients tell of subsequent relief from neuritis or arthritis. We already have mentioned the marked improvement in the general health of these patients. This is not a new subject in the literature, but we feel that the electric cautery is not as widely used for cervical disease as it would be, providing more of the profession realized the benefits resulting from this method of treatment.

CONCLUSIONS

1. A thorough bi-manual palpation and speculum examination should be made six to eight weeks post-partum.

2. Cervical disease is responsible for a large proportion of the pelvic pathology found at this time.

3. Office treatment with the electric cautery is a very effective method of correcting this cervical pathology and associated congestion in fundus and fornices.

4. The electric cauterization is a better method than routine trachelorrhaphy for treating cervical disease in patients during the child-bearing period.

5. This correction of the cervical disease causes a marked improvement in the patient's general health and protects her against more serious trouble in later years.

817 CLEVELAND AVE., N. W.

A physician employed by a person responsible for injuries to a third party to observe and examine the injured person is liable for his own negligence which results in an entirely independent injury to the third party, the Supreme Court of Maine held in a recent decision. The plaintiff in the case charged that a new fracture of a broken leg resulted from the examination made by a surgeon employed by an autoist who had run down the injured man. The court held that the relation of the surgeon to the injured man was that of an independent contractor liable for his own torts and when the surgeon's negligence results not in an aggravation of the original injury but in an entirely independent injury. The defendant surgeon claimed that he was the servant or agent of the owner and that the judgment against his principal, followed by payment and a release in full, barred recovery against him.

Is infection after vaccination against smallpox an accident occurring in the course of employment and a compensable accident under workmen's compensation laws when the vaccination had been ordered by the employer?

The Michigan State Supreme Court in a recent decision held that death due to infection following vaccination ordered by an employer as a result of a request by a city board of health is a compensable accident. The court ruled that the vaccination itself was not an accident but that the infection which followed was an accident, being of an unnatural nature and traced directly to the vaccination which occurred in the course and out of the employment.

In a similar case the State Industrial Commission of Virginia ruled recently that infection resulting from vaccination is not a compensable accident, holding that the infection was not an added risk to the claimant's employment.

Colonic Therapy In Mental Disease

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A REVIEW of recent literature dealing with chronic intestinal stasis reveals the fact that considerable difference of opinion exists; not only concerning the etiology and symptoms of such conditions, but also concerning the function of the colon and its relation to the internal economy of the individual. Some authorities maintain that the colon serves no definite purpose and that man would be better off without it. Others believe it to be a useful structure serving a definite purpose.

Among those contributing extensively to the literature on this subject may be mentioned the names of Lane, Hurst, Mummery, Jordan, Kellogg, Schellberg, Adami and others. These may well be considered authorities on the subject and their work and contributions to the literature provides a wide source of information in this particular field.

The normal colon, according to Dr. Alfred Jordan, is one which allows its possessor to live in comfort and good health. Its form, position and peristaltic activity is not, by any means, constant, and considerable variation is compatible with good health.

In its normal state, it is not a uniform tube, but is sacculated, being divided into a large number of compartments known as haustra. In health there is a fairly wide opening between the haustra, especially in the cecum and ascending colon. In certain pathological conditions, there may be an exaggeration of the sacculations, the haustra appearing almost as separate compartments communicating with one another by very small openings. Practically all authorities agree that the large intestine is more or less quiescent except for a few minutes every day when peristaltic movements are going on.

One of the more important functions of the colon is the absorption of water from the intestinal contents immediately after they enter the cecum. Fats, carbohydrates and proteins may also be absorbed to a slight degree. This absorption of fluid is accomplished largely in the cecum, the ascending colon and the first half of the transverse. This process is aided by the antiperistaltic movements of this part of the bowel which serves the purpose of churning and mixing the fluid chyme after its entrance through the ileocecal valve.

From the viewpoint of physiological function, the large bowel may be divided into four parts. The ascending and proximal part of the transverse colon constituting the first part, whose function is the mixing of the bowel contents and the absorption of water. The second part consists of the distal part of the transverse and the descending colon. The descending colon, according to Macleod[1], is never distended with contents and merely serves as a tube for transferring bowel contents from the transverse colon to the sigmoid flexure. The sigmoid flexure constitutes the third part. It serves as a reservoir for fecal material before being expelled in the rectum. The fourth part is the rectum, which functions as an expulsive organ in its normal condition, does not contain feces except just before and during the act of defecation.

The entire gastro-intestinal tract is innervated by the autonomic nervous system through its sympathetic and parasympathetic divisions (Langley Nomenclature). Activating influences are received through the bulbar and sacral divisions of the parasympathetic, and inhibitory influences are received through the thoracic sympathetic. An equilibrium of action is established when these two opposing influences equal each other.

The parasympathetic is composed of two divisions, an upper and a lower. The vagus or upper division, with its nucleus of origin in the medulla, and the pelvic (nervous erigentes), or lower division, with its origin in the sacral segments of the spinal cord. Both of these systems have their motor cells in outlying ganglia intimately associated with plexuses of Auerbach and Meissner. In fact, it is these plexuses which constitute the intrinsic motor supply of the gastro-intestinal tract.

This structure is probably somewhat similar to the nodal tissue of the heart and is capable of carrying on the motor and secretory functions of the stomach and bowels, even after the extrinsic supply composed of the vagus and pelvic nerves, have been severed. The inhibitory nerves of the gastro-intestinal tract are supplied by the splanchnic sympathetic and when these nerves are stimulated the musculature of the intestine is relaxed, the activity of certain secretory glands is depressed, and the blood vessels may be either constricted or dilated, according to the degree and character of the stimulation. The colon as well as other portions of the alimentary canal receives its nerve supply from both the sympathetic and parasympathetic. Investigators differ in opinion as to the source of the parasympathetic supply of the colon. According to some authorities, fibres from the vagus supply the ascending and transvehse colon, the remaining part receiving its innervation through the pelvic nerves. Other investigators such as Langley, Gaskell and Anderson maintain that the colon receives its entire parasympathetic or motor supply

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through the pelvic nerves, the motor cells for these nerves being situated between the muscular walls of the colon. The sympathetic or inhitory fibres of the colon are derived from the lower thoracic and upper lumbar segments in the spinal cord. Their outlying ganglia cells are situated in the splanchnic chain. Stimulation of these fibres relaxes the musculature of the colon, decreases the glandular activity, and may produce either a vasoconstriction or vasodilatation.

Attention may be drawn to the difference in function between the right and left part of the colon. Duval, a French writer, in 1920 made the statement which has been confirmed by others, that in constipation, where fecal material accumulates in the descending colon, that there is often but little effect upon the individual's general health. Many persons seem to tolerate this type of stasis without trouble, because in left-sided constipation the fecal matter is dry and bacterial life inactive. In the right colon, however, we have a more or less liquid condition because moisture is constantly being added from the small intestine and in the presence of pathological bacteria tends to maintain an active focus of infection which may result in a general systemic intoxication.

The alimentary canal and the colon in particular constitutes a very efficient bacterial incubator and culture media combined. Normally, the acid fermentative processes should be in control, but in delayed movement or alterations in the mucous lining of the intestine, putrefactive organisms may predominate over the normal fermentative bacteria so that the bowel content become alkaline in reaction. Under these conditions the digestive products of proteins, fats and carbohydrates contribute material for the generation of toxins. These toxins are formed largely by the action of bacteria upon protein matter, which has been arrested in its passage through the large bowel. In such cases, where colonic stasis has existed for some time, the putrefactive changes may saturate the tissue fluids to such an extent that the detoxicating powers of the liver and kidneys are lost or impaired with the result that the tissue fluids become more and more saturated, sometimes to such a degree that functional changes and even degenerative structural changes may result.

Radical claims have been made relative to such functional and structural changes. Jordan[2], coworker of Sir Arbuthnot Lane, has made the statement that, "intestinal stagnation gives rise to a definite train of clinical disturbances, while toxemia, of the circulation blood by the production of bacterial toxins, effects every tissue and organ of the body. Many of the symptoms and signs of stasis are due to derangement of the ductless glands and other organs. So interwoven are the effects that it is impossible to devise a complete or biological classification of the symptoms and physical signs of chronic intestinal stasis. Derangement due to the direct effect of intestinal stagnation are constipation, flatulence, distension, abdominal tenderness, and anorexia. There may be nausea, foul breath and in advanced stages the bowel wall may be effected by the general toxemia, mucous membranes become catarrhal and the constipation gives place to a form of diarrhoea in which mucous is voided with small amounts of fecal material. Some of the symptoms of early stasis may be said to be due to uncomplicated toxemia, though no one can say when derangement of the ductless glands begins to enter into the picture. The early symptoms include headache, backache, aching joints, neuralgia, and neuritis. Attacks of asthma have even occurred in some cases. All the early symptoms enumerated above are intermittent at first, but become more persistent as the disease progresses and as it gains a firmer hold on the victims, it may give rise to a train of mental disturbances, covering the whole range of intensity from lassitude and sexual inertia to delusional insanity. The catalog includes depression, lack of energy, lack of concentration, loss of memory, sleeplessness. More serious mental disturbances include the melancholies and even epiliptoform states."

Such conditions as pyhorrea, arthritis joint conditions, dental abscesses, and septic tonsils, are, according to this authority, due, at least in some instances, to the infection and toxemia of intestinal stasis.

Schellberg[3] in 1923, made the statement that "the relation of diseased conditions of the digestive tract to disturbed mental states is only beginning to be appreciated, but already the cures of those who have been regarded as hopelessly insane simply by the abolition of pathological intestinal conditions, have made a profound impression upon the medical profession. That fecal stasis may be the basic cause of many obscure psychoses, seems altogether probable." He further states that: "It is not at all unusual to find cases of functional intestinal derangement where the mental depression is so severe as to be entirely beyond the patient's voluntary control, constituting an acute mental disturbance which is comparable in the mental sphere to a severe physical pain in the sphere of sensation. Nervous impulses arising in the abdominal cavity and passing to the brain along the vagus and sympathetic nerve paths, have the power of directly disturbing the mental condition on which the sense of well-being depends and of giving rise to an acute mental distress which represents the physical pain which the subject would have experienced if the afferent impulse causing the stimulation had been transferred from the vagus or the sympathetic to the sensory nerves. The fact that many mental disturbances are really due to functional derangement in the alimentary

canal may be demonstrated clinically by the fact that these conditions yield to treatment that lessens the amount of bacterial activity in the bowel. Individuals suffering from physical disability such as various forms of nervous depression and excitation and general endocrine imbalance often manifest a mental disturbance as well, such a syndrome has been postulated under the popular diagnosis vagatonia."

According to Dr. Harvey Kellogg, most civilized people are suffering from intestinal stasis and from the consequences of intestinal toxemia.

The great increase of heart and blood disease, diabetes, Bright's disease, and other disorders of degeneration which have occurred within the past thirty years is becoming more and more evident with each year's issue of the United States mortality statistics, and is, without doubt, in a large part due to the wearing out of the defensive mechanism of the body on account of the enormous amount of over-work required of it in dealing with the flood of toxic products which find their way from the colon into the blood stream. He further states that practically every person needs the benefits to be derived from a change of bacterial flora and the avoidance of an excess of animal proteins.

His experience in dealing with a considerable number of tired business and professional men has convinced him that most of these men are not tired because they are over-worked, but rather that they think they are over-worked, because the work which they once enjoyed and were able to do so easily, has become irksome and fatiguing. The fact is that they are suffering from toxic fatigue rather than normal fatigue which results from labor and is quickly cured by rest. Rest does not cure toxic fatigue. The individual upon rising in the morning feels more tired than when he went to bed, because during the night the liminished activity of the heart, liver and kidneys has resulted in an accumulation of toxins in the blood stream, these toxins originating from putrefactive changes due to intestinal stasis. In this connection, we may ask the question of physicians, or even nurses and attendants who have had years of intimate experience among the insane, whether or not they have seen attacks of acute mental disturbance aborted or relieved by the use of a prompt and efficient cathartic?

In a discussion of alimentary toxemia before the Royal Society of Medicine of Great Britain a few years ago where some sixty leading physicians of London were present, Dr. J. F. Buscow, the director of a large hospital for the insane, asked this question: "Who has not seen a prodigious evacuation of the bowels in the hands of a physician, terminate a case of insanity?" He further added that in his opinion it was obvious that constipation encouraged and accentuated such mental symptoms as apathy, irritability, preverted moral feeling, melancholia, mania, and even suicidal inclinations, while on the physical side it tends to produce a long string of diseases.

It will be quite beyond the scope of this paper to attempt to consider all of the features in connection with chronic intestinal stasis and its possible relation to disordered mental states. Hence, it will be our purpose to limit the discussion to some of those conditions in which the persistaltic and expulsive power of the colon appears to be defective. In this connection we would like to emphasize the possible correlation between the nervous innervation of the bowel and colonic stasis. Time would not permit a detailed discussion of the nervous mechanism of the intestinal tract; however, we feel it appropriate to outline certain generalities.

Eppinger and Hess[4] in 1910 suggested the classification of individuals into two great vegetative types, namely the sympatheticotonic and parasympatheticotonic, according to the predominance of the sympathetic over the parasympathetic and vice versa. This classification is now well established in medical terminology. A literal translation of these terms is somewhat misleading and presents a distortion to the true meaning of the term tonus as used in physiology. The original conception of the term is intended to convey the idea of hyper-irritability.

Pottenger[5] considers the sympathetic as the protective and energy expending system of the body and the parasympathetic as the energy conserving system, whose function is the maintenance of the organism as an individual. Of the two divisions the sympathetic is the most widely distributed and consequently its action is more general. These two systems are very intimately associated with the activity of the endocrine glands and an hyper-irritability of either of the systems tends to produce an increase of the secretion of the glands which are innervated by that particular system. For example, the parasympathetic when stimulated, results in an increase in the secretion of the glands of the stomach, bringing about a gastric hyperchlorhydria, while on the other hand, a stimulation of the sympathetic acting upon the suprarenal glands produces an increase in the secretion of adrenaline which, in turn, intensifies and prolongs the action which results from sympathetic stimulation.

In comparing the effects produced by sympathetic and parasympathetic stimulation, we find that stimulation of the sympathetic contracts the pilomotor muscles, producing the so-called "goose flesh", and contracts the musculature of the sweat glands. The blood vessels may be either dilated or contracted dependent upon the character and strength of the stimulus. The rate of the heart beat is increased, the pupils are dilated, secretion of the lachrymal and salivary glands decreased, the secretion of mucous mem-

brane of the nose and throat is diminished, resulting in a dry throat and coated tongue. The musculature of the respiratory tract is relaxed and secretion diminished. The musculature of the entire gastro-intestinal tract is relaxed with a decrease in secretion and impairment of peristaltic activity. The sphincter muscles of the entire gastro-intestinal tract, the ureters, uterus and bladder are constricted. Parasympathetic stimulation on the other hand, produces just the opposite effects or no effects at all, dependent upon the organs which it innervates.

From this it would seem that the activity and integrity of the autonomic nervous system may have a very important application in at least certain types of individuals who show evidence of functional intestinal stasis. Let us for instance take a specific case, that of a young man, 21 years of age, admitted to the Toledo State Hospital some few months ago, presenting rather typical manifestation of dementia praecox. *X*-ray examination showed that more than 10 days were required for the elimination of a barium meal. The following are some of the symptoms presented by the patient:

Dilated pupils, definite pallor of the skin, cold clammy extremities with excessive perspiration, heart rate 110, systolic blood pressure 145, mouth and throat dry, tongue coated, breath foul and offensive, appetite very poor. Mentally the patient was inactive, apathetic, negativistic and at times stuporous. A history given by the relatives stated that he had suffered from chronic constipation for years. Following simple colonic irrigation, sinusoidal galvanic current treatment, ultra violet radiation and tonic hydrotherapy, he has in the course of a few weeks shown a decided improvement, so much so that the prognosis now appears to be quite favorable. The symptoms in this case rather definitely indicate the lack of autonomic equilibrium and the question may well be asked, what relation may this lack of autonomic equilibrium have to the patient's intestinal stasis or mental disease. Although this is a rather pronounced case, it is by no means an isolated one. In the series of patients examined, quite a high percentage have shown evidence of some autonomic disorder. In this connection it may be mentioned that in the manic depressive type very few of the excited and maniacal subjects showed any evidence of stasis, while on the other hand, a very high percentage of the depressed manics presented evidence of stasis of a pronounced character.

In connection with the subject of this paper, a number of pertinent questions may be raised. For instance, what relation does intestinal stasis accompanied by putrefactive fecal changes bear to mental disease? Is it an etiological factor in the development of a psychosis or a symptom incidental to the psychosis? Is it not possible to find pronounced stasis without any evidence of mental disorder, or, on the other hand, to find many definite mental disorders not accompanied by any evidence of stasis? It was with some of these questions in mind that about a year ago, it was decided to commence an investigation at the Toledo State Hospital to determine whether or not any correlation could be established between mental disease and colonic stasis. The problem was approached without any performed prejudices and we were prepared to institute or discard methods of treatment dependent upon the results of our investigation.

During the past year some 70 patients have been examined. These were composed of dementia praecox, manic depressive and psychoneurotic types. The degree of stasis has been determined by the administration of barium meal and the subsequent *X*-ray or flouroscopic examination at intervals of at least 24 hours. According to most authorities the normal time required for the elimination of a barium meal is between 36 to 48 hours. This at least may be considered as a conservative estimate and when more than 48 hours are required, it may safely be assumed that some degree of stasis exists. The average rate at which the barium meal reaches and passes through the colon is approximately as follows: The cecum is reached in four hours, the hepatic flexure at six hours, the splenic flexure nine hours, beginning of the iliac colon at eleven hours and pelvic colon at twelve hours. At 24 hours the entire colon should be filled and in from 36 to 48 hours it should be completely emptied. In the series of 70 cases which we have examined, we have found that in approximately 80 per cent, more than 48 hours were required before elimination was complete. It has not been uncommon to find that several days would elapse before the barium would reach the sigmoid.

At the time of the writing of this article an *X*-ray examination of a female manic depressive of the depressed type, has just been completed. At 24 hours the barium had reached the hepatic flexure, at 72 hours it had reached the splenic flexure, at 168 hours it had reached the sigmoid. About 240 hours were required before the entire meal had passed through the colon.

In the 70 patients that have been examined, 37 were dementia praecox, 21 were manic depressive and 12 were psychoneurotics. The results were as follows:

In 37 Dementia Praecox—
- 86% required more than 48 hrs.
- 56% required more than 100 hrs.
- 27% required more than 150 hrs.
- 16% required more than 200 hrs.
- Average Time was 113 hrs.
- Maximum Time was 360 hrs.

In 21 Manic Depressives—
- 76% required more than 48 hrs.
- 51% required more than 100 hrs.
- 47% required more than 150 hrs.
- 33% required more than 200 hrs.
- Average Time was 154 hrs.
- Maximum Time was 408 hrs.

In 12 Psychoneurotics—
67% required more than 48 hrs.
33% required more than 100 hrs.
1% required more than 150 hrs.
Average Time was 80 hrs.
Maximum Time was 166 hrs.

In the 21 manic depressives, 16 were of the depressed type and 5 were of the manic type. None of the 5 maniacal type showed any evidence of stasis.

The treatment of these patients has been limited very largely to colonic irrigations and sinusoidal galvanic current treatments. These have been given from two to three times a week. In addition to this ultra violet radiation and hydrotherapy has been used when indicated. In the colonic irrigation work, the colon tube has not been used. We have been able to demonstrate that the entire colon may be washed out by using only a short enema nozzle.

At each treatment the patient is, as a rule, given from four to six irrigations, or as many as may be necessary for the return flow to become clear of fecal matter. Usually from 25 to 50 oz. of water are used at each irrigation. During the past year, 30 patients have received treatment over a period of several months. Of these, 18 were dementia praecox, seven manic depressives and five psychoneurotics. The results to treatment are as follows:

In the Dementia Praecox Group—
17% Recovered.
50% Improved.
40% have been released from the hospital on trial visit.

In the Manic Depressive Group—
70% Recovered.
15% Improved.
85% have been released from the hospital on trial visit.

In the Psychoneurotic Group—
80% Recovered.
80% have been released from the hospital on trial visit.

In the total of 30 cases treated—
40% Recovered.
33% Improved.
57% have been released from the hospital on trial visit.

In the dementia praecox cases nine are still receiving treatment and in the three of these who are, at the present time, reported as improved, we feel that the prognosis is definitely favorable. In the event of their recovery the rate for this group will be 33%, which would be very gratifying. One praecox, whose psychosis was of two years duration, left the hospital as improved after about five months of treatment, but was returned in a few weeks in a definitely worse condition than when he left.

Treatment was again instituted and continued for several months. A short time ago, he again left in a much better condition than at the time of his first visit. His parents had made arrangements with a local physician to continue his treatment and recent reports state that he is making very favorable progress.

A female praecox, 26 years of age, whose psychosis existed for about eight months made an excellent and complete recovery after about four months of treatment. This woman had been cared for by some local physicians and in a private sanitarium at an expense of over $1500, before her commitment. She was a typical praecox and had been diagnosed as such at a well known psychiatric clinic in a neighboring state. She has remained well for more than eight months without treatment.

An extremely depressed and agitated male manic, 48 years of age, with a stasis of 10 days duration, showed a decided, well marked improvement immediately following his first irrigation and completely recovered in about one week. He was released from the hospital, but returned at his own request for treatment over a period of several months. He has remained well for more than eight months during which time he has not been treated. Another depressed manic, with a seven day stasis, recovered in about two weeks. He was released from the hospital, but some two months later had a second attack which necessitated his return. He again recovered in about two weeks time and following the second release he voluntarily returned to the hospital at weekly intervals, a distance of 70 miles, for treatment. He has remained well for more than six months.

A female catatonic dementia praecox of the most pronounced type, a woman 33 years of age, the mother of three small children made an absolute recovery in about four months and for the past six months she has had complete charge and supervision of her home and family. During this time she has not received treatment. A male dementia praecox, formerly a college student, with a psychosis of seven years duration, was found to have a stasis of about 200 hours. He had been treated at various hospitals and sanitariums in several states. After six months he was released as improved. We have his father's statement that at the present time his condition is definitely better than it has been at any time during he past five years. Another male praecox, 25 years of age, with a seven day stasis, whose condition demanded that he be kept under close confinement and supervision, has shown a definite improvement and is now working daily on the farm. His prognosis, at the present time, appears very favorable. A male psychoneurotic with an 80 hour stasis, who had been treated at home and in sanitariums for about a year, recovered in three months time and has remained well for more than seven months.

While the result of treatment in many of these cases has been gratifying, we do not by any means attempt to convey the impression that intestinal stasis, chronic constipation or whatever one may see fit to call it, is the specific cause of

mental disease; or, on the other hand, we do not make any claims that the treatment is a specific or cure all. From our personal experience, we have found definite cases of mental disease which had no stasis. We have, also, found very pronounced stasis co-existing with psychosis, which have not improved even after more than six months of treatment. We do feel justified, however, in interpreting our results, in general, as a favorable indorsement of this particular type of therapy and it is our opinion that it has been effective in bringing about a higher rate of recovery and improvement than would otherwise have been obtained.

TOLEDO STATE HOSPITAL.

REFERENCES

(1) Macleod (Physiology & Biochemistry) (1928).

(2) Jordan (Chronic Intestinal Stasis) (1923).

(3) Schellberg (Colonic Therapy in the Treatment of Disease) (1923).

(4) Eppinger & Hess (Die Vagotonic, Sammlung Klinischer Abhandlungen, von Noorden.) Nos. 9 & 10. (1910).

(5) Pottenger (Symptoms of Visceral Disease) (1925).

DISCUSSION

O. O. FORDYCE, M.D., Toledo: When we started colonic therapy at the Toledo State Hospital a little more than one year ago we were well aware of the fact that this kind of therapy had been abused and unduly exploited. We tried to approach the problem in a scientific way. I advised the medical staff to not prescribe colonic therapy except in definite cases of intestinal stasis diagnosed by means of the barium meal and *X*-ray. This policy has been carefully carried out in every instance. Every one of the seventy cases reported by Dr. Kaiser was first presented at staff meeting and a psychiatric diagnosis was made and recorded. Every case released on trial visit was again brought before the medical staff at the time the visit was granted and the mental condition of the patient recorded. We have tried to be conservative in our claims.

We do not know the etiology of the functional psychoses. We all know that constipation can affect the personality. Is it not logical to assume a possible relationship between the autonomic nervous system and some of the functional psychoses through the sympathetic and parasympathetic divisions which innervate the gastro-intestinal tract? I believe this offers a most interesting and important field for research.

In conclusion I desire to read a statement made by Dr. George W. Henry, Senior Physician and Director of Laboratories, Bloomingdale Hospital, New York. This statement appears in the March, 1929 edition of the *American Journal of Psychiatry* and refers to a previous paper "Gastro Intestinal Motor Function in Schizophrenia" by Dr. Henry appearing in the July, 1927 number of the *American Journal of Psychiatry*. In discussing focal infection in teeth he states "Further evidence of this possibility is found in roentgenographic observation of gastro-intestinal motor functions in schizophrenia, in which retention of barium in the pelvic colon for longer than five days occurred in over 70 per cent of acute cases. The frequently observed toxic feature in the clinical manifestations of acute schizophrenia, therefore, have abundant source in colonic stasis."

CARL W. SAWYER, M.D., Marion: I wish to commend Dr. Kaiser for his paper. I have enjoyed it very much indeed. About 21 years ago I wrote a paper on exactly the same subject and came to the same conclusions. During the last 21 years I have discarded and taken back the work of that paper three different times.

Dementia praecox being such a seemingly hopeless proposition, it seemed to me that one was warranted in taking any measures to overcome the difficulty. As one of the most prominent symptoms in all of these cases was toxaemia, we felt justified in progressing along some lines that would have a tendency to unload the case.

It seemed plausible and also feasible, according to historical experience and to observation, to unload the toxic state of these cases coming from the bowel and so we started a course of enemas to handle the situation. Our results were rather startling; so much so that after three years we were on the edge of reporting this method of treating the cases as a definite curative measure.

As it has always been our policy to be careful in making statements which might prove misleading, and owing to the fact that our observations were founded on too small a number of cases and had run too short a time, and in a way had been without control, we decided that before coming out with any definite statements, any more than the paper alluded to in the beginning of this discussion, we would stop giving the enemas to this type of case for a certain length of time.

At the end of about another three years we canvassed the cases that had been treated without enemas and we found from the summation of the two groups that the percentage of recovery was about equal in both of them, consequently we questioned whether or not the enemas really were solely responsible for the seeming improvement.

During the intervening years we have returned to the enema procedure on two or three occasions, running a considerable group of cases through on it and controlling them with groups not similarily treated. At the same time we set about a rather rigid investigation of the laboratory findings in these cases.

After extensive investigation over a period of some eighteen years we were able to prove to ourselves that indican was consistently present in the urines of dementia praecox cases when they were disturbed. In fact it is the only finding that consistently held up through the entire group of cases. However, actual records kept have led us to believe that while enemas do a remarkable amount of good, it is questionable if they bring any more permanent results than other measures do. Nevertheless, it is a procedure which should be followed out and I think Dr. Kaiser has developed it in a splendid way in the paper which he has presented today.

His *X*-ray findings are splendid and brilliant and show a type of work that speaks well for the institution in which it was perfected.

Mental cases are all creatures of overload. It is a case of the last straw breaking the camel's back. In many instances if this last straw, which in the dementia praecox case seems to be the intestinal toxaemia, is removed, the back straightens up and carries the remaining load satisfactorily. Many mental cases being relieved of the toxic substances they are absorbing from the intestine will clear in their psychical behavior and seem to be normal and well. Toxaemia recurring they will go back into their troubled state.

Up to the present time we have not the slightest idea as to what it is that constitutes the

psychical side of the difficulty, or how the psychical side works or is worked upon.

As stated in an earlier discussion today medicine has made a remarkable advance lately in the fact that it has taken the attitude that psychoses are due to and associated with other difficulties and that the removal or amelioration of these difficulties and their baneful influences will in many instances relieve the psychical side of the patient, but what the psychical side is, what that peculiar, particular, personal thing is, that makes one person become mentally disturbed from the absorption of toxins from the gut and another one absolutely impervious to the same toxic substances, is seemingly an unattainable and as yet an unapproachable and unanswerable problem.

Because of this situation, work such as Dr. Kaiser has brought out here is especially commendable as it shows how the taking off of one of the overloads that the patient is suffering from, will in many instances bring them back to a normal condition again.

In 1912 or 1913 we had brought to us a girl suffering from dementia praecox. At that time we were assiduously giving high enemas. She was placed on this line of treatment and after a number of months made what seemed to be a good recovery. Later she entered one of the large training schools for nurses, graduated, and became a charge nurse in that institution, and when we called upon the head of the nursing organization and asked her regarding this girl, she stated that she was an exceptionally good worker and very satisfactory and was holding a rather exacting position. It is needless to state that the superintendent was greatly surprised when we told her that her accurate nurse had but a short time before been a typical dementia praecox.

We could name many other cases of this same type that are now out in the world, going along and getting along splendidly, some of them even after 20 and 24 years have elapsed since their original trouble.

I thought that my original paper 21 years ago was a splendid portrayal of this subject and I still think it was, but I think Dr. Kaiser's paper is a much better one, because he has added to it the *X*-ray findings which prove his points so clearly.

I wish him all the success in the world in his endeavors and I am going back to my own institution to start for the fourth time another series of dementia praecox cases on enemas.

CLYDE E. SHINKLE, M.D., Cincinnati: I merely want to call attention to the fact that here is another fine piece of work coming from a State hospital. When will our State Welfare departments see the light to the extent that men who can do such things can find an attractive future, right in the state hospital system, instead of being constantly driven from the service by the unattractive future offered them?

The Expert Testimony Problem

Ever so often an encouraging sign in the problem of expert testimony in legal controversies is revealed.

There appears to be hope at present that in the not distant future a more or less uniform, as well as sane, procedure will have been worked out by the various states. All states may not be able to meet the question in the same way, but there is hope that all will be able to achieve the same result, which would mean the wiping out of the traffic in authoritative counsel and the sale of selfish and partial information.

A new approach to the solution of this grave problem which has been condemned and scored innumerable times by the medical profession was illustrated recently in St. Louis, Missouri, in the Schumm murder case. By action and agreement of the trial court, the prosecuting attorney and the attorney for the defense, three physicians, experts in mental diseases, were called upon to examine Schumm and report their findings to the court. All parties to the agreement promised to accept the conclusion of the commission. The verdict of the experts was that Schumm was insane. The findings were accepted; the jury selected in a few moments, and the verdict of insanity returned within half an hour after the jury had retired. The defendant was sentenced to a state hospital for the insane for life.

In the words of the editor of the *Missouri State Medical Journal:*

"Thus was concluded, in an orderly, dispassionate and scientific manner, the trial of an unfortunate victim of paranoia who shot and killed his father and seriously injured his mother. The case held all the elements tending to provoke a bitter 'battle of experts', if the trial had been conducted in the customary manner. That we have been spared the sensational and utterly fruitless spectacle so characteristic of the conventional method in similar cases in the past is due to the elightened attitude of the court and the attorneys. To these gentlemen must be given the credit for having initiated a reform in the conduct of murder trials where insanity is a plea that we hope will soon cease to be a discretionary power but become an obligatory procedure through legislative enactment."

There is no valid reason why such procedure in all cases involving expert witnesses, whether the question of sanity is raised or not, could not be universally utilized.

Attempts to institute such a plan in Ohio through revision of the law have been made within recent years. The medical profession always has taken a prominent part in urging the passage of this expert witness legislation. Partial success has been attained. However, a number of very important phases of the legislation necessary to bring about a complete remedy for this evil condition have been rejected by the Legislature. New attempts to secure this much needed reform may be made at the next session of the General Assembly. If so, the medical profession of Ohio individually and collectively should do its share in creating sentiment for the correction of a situation which has brought forth much uncalled for criticism of innocent members of the profession.

Proceedings of The House of Delegates, Ohio State Medical Association, Columbus, May 13, 14 and 15, 1930

MINUTES

The Eighty-Fourth Annual Meeting of the Ohio State Medical Association was officially opened at the Neil House, Columbus, at 9:30 A. M., Tuesday, May 13, 1930. An official welcome on behalf of the local profession and the city of Columbus was extended by Dr. Robert B. Drury, President of the Columbus Academy of Medicine.

After brief remarks, Dr. Drury introduced Dr. Albert H. Freiberg, President of the Ohio State Medical Association, who called to order the House of Delegates.

The President then called upon Dr. S. J. Goodman, Chairman of the Committee on Arrangements of the Council, and General Chairman of the local committees on arrangements, for announcements. Dr. Goodman called the attention of the delegates to the important features in the official printed program.

Eighty-five delegates and officers responded to the roll call, being a majority of the delegates registered, constituting a quorum under the Constitution (See tabulation for roll call attendance on page 531).

Upon motion by Dr. Moore, seconded by Dr. Floyd and carried, the minutes of the House of Delegates of the 83rd Annual Meeting held in Cleveland, May 7, 8 and 9, 1929, were approved as published on pages 467 to 480, inclusive, of the June, 1929, issue of *The Journal*.

The President called the attention of the delegates to the requirement that all resolutions to be introduced later in this session must be referred to the Committee on Resolutions for consideration by the committee and transmission to the House of Delegates at the Wednesday afternoon session, thus requiring that all resolutions to be considered at this Annual Meeting must be introduced at the present session.

Telegrams of best wishes for a successful meeting and fraternal greetings were read from Dr. A. S. Rudy, Los Angeles, California, former member of the Council of the Ohio State Medical Association; and from the Iowa State Medical Society. Official appreciation for these greetings was expressed by the House of Delegates.

THE ANNUAL REPORTS

The annual reports of officers, standing committees and special committees were then called for in the regular order of procedure. President Freiberg called attention to the publication of all these reports in the May, 1930, issue of *The Journal* which were submitted for the consideration of the House of Delegates in published form, these reports being as follows:

Reports of Officers:

(a) Report of the Councilors as to the condition of the societies in their respective districts, pages 441 to 443.

Reports of Standing Committees:

(a) Public Policy—J. H. J. Upham, Columbus, Chairman, pages 421 to 425.

(b) Publication—Andrews Rogers, Columbus, Chairman, pages 425 to 426.

(c) Medical Defense—J. E. Tuckerman, Cleveland, Chairman, pages 426 to 429.

(d) Medical Economics—J. Craig Bowman, Upper Sandusky, Chairman, pages 415 to 421.

(e) Medical Education and Hospitals—Ben R. McClellan, Xenia, Chairman, pages 429 to 432.

(f) Auditing and Appropriations—S. J. Goodman, Columbus, Chairman, pages 435 to 437.

Reports of Special Committees:

(a) Mental Hygiene—T. A. Ratliff, Cincinnati, Chairman, pages 437 to 439.

(b) Periodic Health Examinations—V. C. Rowland, Cleveland, Chairman, pages 433 to 435.

(c) Military — H. H. Snively, Columbus, Chairman, pages 439 to 441.

President Freiberg announced that all of the foregoing reports would be referred at this time to the Reference Committee on Annual Reports to be announced later at this session, for consideration and report by the Reference Committee at the Wednesday (May 14) afternoon session of the House of Delegates.

Appointment of Reference and Active Committees

President Freiberg announced the appointment of reference and active committees as follows:

Annual Addresses of the President and President-Elect — Gainor Jennings, West Milton, Chairman; Louis Feid, Cincinnati; O. P. Tatman, Chillicothe; F. C. Anderson, Mt. Vernon; H. V. Paryzek, Cleveland.

Resolutions—J. Craig Bowman, Upper Sandusky, Chairman; W. E. Griffith, Hamilton; E. L. Crum, Lodi; E. M. Ickes, Fremont; C. I. Stephens, Ansonia.

Annual Reports of Standing and Special Committees—Richard Dexter, Cleveland, Chairman; B. H. Blair, Lebanon; C. U. Hanna, Zanesville; C. K. Startzman, Bellefontaine; C. R. Steinke, Akron.

Credentials of Delegates—J. C. Tritch, Findlay, Chairman; D. M. Criswell, Coshocton; V. N. Marsh, Painesville; O. U. O'Neill, Ironton; J. A. Weitz, Montpelier.

Tellers and Judges of Election—S. L. Bossard,

Gallipolis, Chairman; L. A. Adair, Wooster; R. M. Andre, Waverly; J. H. Poulton, Springfield; E. R. Thomas, Youngstown.

Election of Nominating Committee

In compliance with provisions for procedure in selecting members of the Nominating Committee from each of the ten councilor districts, nominations for election by the House of Delegates to membership on the Nominating Committee (as resulting in the election of Dr. Stephens as Laws) were made as follows:

First District—E. O. Smith, Cincinnati, nominated by Dr. Kiely.

Second District—A. O. Peters, Dayton, nominated by Dr. Bryant. C. I. Stephens, Ansonia, nominated by Dr. Houser. A standing vote was taken on these nominations in the second district, resulting in the election of Dr. Stephens as the member of the Nominating Committee from the Second District by a vote of 50 to 3.

Third District—J. C. Tritch, Findlay, nominated by Dr. Klotz.

Fourth District—Charles Lukens, Toledo, nominated by Dr. Slosser.

Fifth District—Geo. Edw. Follansbee, Cleveland, nominated by Dr. Dexter.

Sixth District—C. R. Steinke, Akron, nominated by Dr. DeWitt.

Seventh District—J. C. M. Floyd, Steubenville, nominated by Dr. Miller (Tuscarawas County).

Eighth District—E. A. Moore, Newark, nominated by Dr. Brush.

Ninth District—R. M. Andre, Waverly, nominated by Dr. Seiler.

Tenth District—John B. Alcorn, Columbus, nominated by Dr. Goodman.

On motion by Dr. DeMuth, seconded by Dr. Startzman and carried, the House of Delegates elected each of the above members nominated for the Nominating Committee.

President Freiberg then announced the official personnel of the Nominating Committee as elected by the House of Delegates, as follows:

First District—E. O. Smith.
Second District—C. I. Stephens.
Third District—J. C. Tritch.
Fourth District—Charles Lukens.
Fifth District—Geo. Edw. Follansbee.
Sixth District—C. R. Steinke.
Seventh District—J. C. M. Floyd.
Eighth District—E. A. Moore.
Ninth District—R. M. Andre.
Tenth District—John B. Alcorn.

Nominations to Be Made

The President instructed the Nominating Committee on the various constitutional positions to be filled through nominations to be submitted by the Nominating Committee to the House of Delegates at the succeeding day's session, contingent upon the adoption of pending constitutional amendments scheduled for consideration later in this session.

Introduction of Resolutions

The next order of business in the procedure of the House of Delegates being the introduction of resolutions, the President called for resolutions at this point. The following resolutions were then introduced, and on motion, duly seconded and carried, were each referred to the Committee on Resolutions for consideration and report at the second session of the House of Delegates.

RESOLUTION A. INTRODUCED BY DR. TUCKERMAN

WHEREAS, The Ohio State Medical Association, representing organized medicine and the large majority of the medical profession of Ohio, has on numerous occasions been requested and urged to officially approve or endorse outside, independent agencies, associations and organizations interested in the fields of public health and public welfare, in each of which the medical profession is vitally interested, and

WHEREAS, The granting of such approval or endorsement would be construed as a sanction and acquiescence of medical organization in any activities or any policy that might be pursued by such agencies, organizations or associations, although medical organization might not contemplate or have any control over such future development, alliances and programs, and

WHEREAS, Such approval and endorsement might at some future date place medical organization in the embarrassing position of being technically allied with agencies, organizations or associations whose activities in the future might be questionable and opposed to the principles and policies of the medical profession and of medical organization, therefore,

BE IT RESOLVED, That the House of Delegates of the Ohio State Medical Association at the eighty-fourth annual meeting of the State Association, May 13, 14 and 15, 1930, Columbus, Ohio, disapprove of any action by the officers, Council, and standing and special committees of the Ohio State Medical Association which might be construed as placing the State Association officially on record as approving or endorsing any outside independent agency, organization or association over which the medical profession and medical organization does not have direct guidance;

HOWEVER, BE IT FURTHER RESOLVED, That the House of Delegates sanction and recommend the cooperation of the Council with individuals and agencies, organizations and associations on definite programs which are in accordance with well established policies of medical organization and with activities which have met the opproval of the medical profession generally.

RESOLUTION B. INTRODUCED BY DR. GOODMAN,

Secretary of Council, on behalf of Council.

WHEREAS, False propaganda, misinformation and exaggerated claims are being widely disseminated in connection with various food and nutritional fads and unscientific diets, and

WHEREAS, Any balanced diet should contain animal protein, fruits, vegetables, especially the leafy vegetables, and the better grades of bread prepared from flour which will insure adequate

vitamin and mineral salt content, digestible fat such as butter-fat, and sufficient of the digestible carbohydrates to afford readily available energy; and

WHEREAS, The allegation that meat, white bread, or any other staple food included in a mixed diet is responsible for certain grave illnesses, is not supported by scientific facts; and the danger of nutritional deficiencies has been grossly exaggerated by faddists, and

WHEREAS, Any variation from a normal diet should be prescribed only by a properly trained physician after a careful study of the dietary requirements of the individual, therefore

BE IT RESOLVED, That the House of Delegates of the Ohio State Medical Association hereby places itself on record as above, in pointing out and condemning from the standpoint of public and individual health, the unscientific food fads and the various special and unbalanced diets.

RESOLUTION C. INTRODUCED BY DR. SEIBERT:

WHEREAS, The health and welfare of the public is being menaced to an alarming degree by the pernicious propaganda being issued over the radio by medical quacks and unscrupulous commercial healing concerns, and

WHEREAS, Numerous charlatans have found the radio a medium of activity for the distribution of dangerous and harmful advertisements, exploiting worthless patent medicines, alleged remedies and pseudo-scientific treatment methods, and

WHEREAS, A nation-wide campaign has been launched to exclude from the air the obnoxious propaganda of quacks and imposters, through cooperative agreements between medical and health authorities, operators of broadcasting stations, better business bureaus and governmental agencies.

BE IT RESOLVED, That the Ohio State Medical Association at its eighty-fourth annual meeting, May 13-15, 1930, at Columbus, Ohio, approve of the efforts now being made to drive health imposters from the air and recommend that the component county medical societies of the state cooperate in this meritorious campaign by taking an active interest in steps which may be taken by local authorities or federal officials in stopping the distribution of injurious and detrimental medical and health propaganda.

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to the Federal Radio Commission which is empowered to revoke the license of any broadcasting station that is not serving the public interest, convenience or necessity.

RESOLUTION D. INTRODUCED BY DR. DAVIDSON:

WHEREAS, Quite general dissatisfaction seems to exist among members of the medical profession of Ohio in regard to the apparent arbitrary practice of many industrial and commercial institutions of the State, in attempting to direct the surgical and medical care of their employes to one or more designated physicians and surgeons.

AND WHEREAS, This practice is in direct conflict with the intent of the Workmen's Compensation Act, which provides that the injured and ill employes shall have the right to choose their own medical servant.

BE IT RESOLVED, That the House of Delegates of the 84th Session of the Ohio State Medical Association, respectfully ask that the officials and the Council make all possible effort to have this wrong interpretation of the Workmen's Compensation Act corrected, either through conferences with the members of the Industrial Commission of Ohio, or if necessary, requesting the amendment of the present Workmen's Compensation Act.

We believe that in this request that the injured workmen's personal rights, the physicians privilege, and the intent of the Legislature will all be justly served. Let's remove one peg from the structure of State medicine which is fast being erected in Ohio.

RESOLUTION E. INTRODUCED BY DR. STEVENSON:

WHEREAS, On account of slight technical errors, physicians are being fined and threatened by Federal Prosecutors and Court, and whereas recently a physician, seventy-one years of age and a member of the State Society for years, was sent to the Canton Workhouse for nine months for giving tablets to an addict employed as a detective.

And moreover the Government does not supply any hospital or sanitarium for the cure of addicts. But at the same time the government has made a technical ruling that a walking addict must not be given a prescription even in a reduction treatment, and both druggists and doctors have been fined in such cases. According to the Government actions the only refuge for a poor addict is the penitentiary.

THEREFORE BE IT RESOLVED, That the President of the State Society appoint a committee to consider such cases and thus inform the members as to the peculiar technical points to be observed. The committee with the aid of Council will consider possible modification of legislations and rulings. Furthermore that the delegates to the American Medical Association at Detroit be asked to bring this matter to the attention of the A.M.A. for action to lessen the number of such scandals in the future. Further be it resolved that the government provide for the sanitorium treatment of addicts if the family physician may not treat them. Organized medicine will always support the prevention and restriction of addiction especially if done in a humanitarian way.

The suspension of narcotic licenses would be clearly indicated where warning has been given. The testimony of addicts in detective service will be found to be a doubtful procedure.

RESOLUTION F. INTRODUCED BY DR. STEVENSON:

WHEREAS, Vested Trusts from Chicago and Minneapolis have visited with their agents the Councils of several state medical societies and induced them in similar language to support the false inference that white bread and muscle meat are complete foods.

WHEREAS, Noted nutrition authorities such as McCollum, McCarrison, Sansum, Plimmer, Mellanby, and many others have divided foods into two classes; first, the protective foods which include all the vitamins and minerals, and the three food factors necessary, found in such foods as milk, green leafy vegetables and fruits. Second, the non-protective foods which do not contain the necessary minerals and vitamines such white bread, white sugar, muscle meats, condiments, coffee, tea, etc., ought to be taken in reduced amounts.

WHEREAS, McCollum makes the statement that in Switzerland and Sweden there is one dairy cow to each two inhabitants while in the Southern States there is only one cow to each ten inhabitants, with the result that in our Southern states there were 22,080 cases of Pellegra reported in 1927 and 5,154 deaths. There is also

much anemia, rickets and scurvy. A recent survey in Pitt County, North Carolina, showed that of 7,000 children questioned only 1,616 drank milk. A large part of their food was imported as white flour and muscle meat. Similar conditions exist in Labrador.

WHEREAS, In those lands in which the majority of the food consist of the protective type the people are noted for their vigor, longevity, and freedom from diseased teeth, etc.

THEREFORE, Be it resolved that the Ohio State Medical Society commend the increase of Dairy Farming as well as orchard gardening and vegetable farming. Ohio is rapidly becoming a dairy state.

Further resolved that *"the allegation that meat, white bread, or any other staple food included in a mixed diet is responsible for certain grave illnesses, is not supported by scientific facts; and the danger of nutrional deficiencies has been grossly exaggerated by faddists,"* all of the foregoing paragraph has no place in a resolution from modern physicians. The term faddist ought not to be applied to our most scientific nutrition authorities. A large amount of white bread and muscle meat will always mean an unbalanced diet deficient in minerals like calcium as well as the six vitamins.

RESOLUTION G. INTRODUCED BY DR. MICKLETHWAITE:

WHEREAS, Organized attempts are now under way through legislation in the Congress of the United States to revive the maternity and infancy activities of the Federal Government as previously carried on under the provisions of the Sheppard-Towner Maternity Act, and

WHEREAS, The proposed legislation is similar to the original Sheppard-Towner Act, and

WHEREAS, It has been demonstrated generally since the expiration of that act on June 30, 1929, that the states are quite capable of, and are, carrying on under their own direction and by the use of their own funds, efficient educational work in the fields of maternal and child hygiene,

BE IT RESOLVED, That the Ohio State Medical Association in annual meeting, May 13, 14 and 15, 1930, at Columbus, Ohio, reaffirm the policy laid down previously by the House of Delegates disapproving paternalistic, socialistic, bureaucratic, impractical or extravagant legislation as exemplified by the original Sheppard-Towner Act and the maternity and infancy legislation now pending in Congress.

BE IT FURTHER RESOLVED, That copies of this resolution be sent to the members of the Ohio Congressional delegation.

RESOLUTION H. INTRODUCED BY DR. HUSTON:

WHEREAS, There is in the present tendency of the times a rapid growth of industrialized medical service, which should not be thwarted or combatted; neither should it be permitted to go on unsystemized thereby lowering the recognized tenets of ethical and "high standard" professional service; but directed and shaped by the medical profession as organized; Therefore be it

RESOLVED, That it is the sense of this Association that every county Medical Society incorporate in its Constitution or By-laws, or rules of action, provisions for the creation of a standing economics Committee, whose duty it shall be to go thoroughly into all plans of any member or members who have under contemplation or consideration the entering into any contract or agreement for medical service with any person, or group of persons, lodge, industry, club or organization; and to suggest and require that such modifications be made to the end that no contract or agreement be entered into that will vitiate in any way the high professional standard that has been nurtured by the medical profession throughout its history.

The committee must require an annual detailed report from all physicians so practicing. These reports to be made upon blanks arranged by the Ohio State Medical Association, but supplied by the employer.

A summary of these detailed reports must be submitted to the local medical society for transmission to the Executive Secretary of the State Medical Association.

Complete details for putting into practice the intent of this resolution to be worked out by the Exectuive Secretary of the Ohio State Medical Association, with the advice and assistance of the Commmittee on Medical Economics of the Ohio State Medical Association.

That it should be set forth that any member, to maintain his or her membership or good standing in the County Society of which he is a member, must submit any contemplated contract or agreement to the economics Committee and be guided by its suggestions before finally entering into such service as stipulated in any such contemplated contract or agreement.

RESOLUTION I. INTRODUCED BY DR. PARYZEK:

WHEREAS, Members of the medical profession and medical organization are vitally interested in the health, welfare and safety of the people and active supporters of all things which they believe to be for the best interests of the public and the economic, social and political security of the state and nation, and

WHEREAS, The recent appalling tragedy at the Ohio Penitentiary has forcibly emphasized and pointed out the need for immediate steps to remedy the present congested and dangerous conditions which exist at many of the institutions for state wards, and

WHEREAS, Investigations have revealed that the highest degree of beneficial service and efficient management are impossible at many of the state's benevolent and penal institutions because of overcrowding and lack of adequate facilities.

BE IT RESOLVED, That the Ohio State Medical Association in annual session, May 13, 14 and 15, 1930, Columbus, Ohio:

Lend its active cooperation and help through its officers, committees, component county societies and individual members to those charged with the duty and task of formulating a sound and practical program for remedying this critical condition;

Use its honorable efforts to arouse the people of the state to the realization of the state's grave responsibility in the field of public welfare;

Place at the disposal of state officials the scientific and technical counsel and knowledge of the medical profession in the drafting of a program commensurate with present and future need.

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to the Governor of the State; the director of the Department of Public Welfare, and the heads of the various mental hygiene and penal institutions of the state.

RESOLUTION J. INTRODUCED BY DR. GOODMAN:

(Resolution and Report adopted by the Council

at its meeting on Monday evening, May 12, and by official council action, transmitted to the House of Delegates for consideration, Tuesday, May 13, during the 84th Annual Meeting of the Ohio State Medical Association.)

WHEREAS, The Council of the Ohio State Medical Association considers it of utmost importance that due emphasis always be placed upon the measures which modern preventive medicine has shown to be of unquestioned value and especially such as vaccination against smallpox, and

WHEREAS, It becomes most difficult to secure the adoption of such preventive measures unless local health boards may speak with authority and may rely upon the support of the State Department of Health and all other health agencies, both official and unofficial, when they have the cooperation of the local medical profession,

THEREFORE, BE IT RESOLVED, That the Council of the Ohio State Medical Association approve the recommendation of the Committee on Public Policy concerning the situation in Tiffin as incorporated in the appended report of the Policy Committee as follows:

The Policy Committee reports to the Council of the Ohio State Medical Association that a hearing was held May 12, 1930, regarding the complaint of the Board of Health of Tiffin involving the attitude of the State Department of Health towards the efforts to check the threatened epidemic of smallpox by bringing about vaccination among the school children of the city. Dr. Neal, state director of health, was heard also and supported the action of the representative of his department. It is the opinion of the Policy Committee that the Tiffin Board of Health took the proper measures under the circumstances and this committee deplores the action on the part of the State Department of Health which appears to have had the effect of weakening the influence of the local Board of Health in that community.

Signed: J. H. J. Upham, Chairman; John B. Alcorn, A. H. Freiberg, C. W. Waggoner and H. S. Davidson, members of the Policy Committee.

Signed: Council of the Ohio State Medical Association by:

S. J. GOODMAN, M.D.,
Secretary of Council.

RESOLUTION K. INTRODUCED BY DR. DEXTER:

WHEREAS, The Ohio State Medical Association has already put itself on record as approving the appointment of impartial expert witnesses by the court at the request of either party to a suit, and

WHEREAS, In nineteen twenty-seven The Ohio State Medical Association and The Ohio State Bar Association introduced into the Ohio General Assembly three bills which would make possible the appointment of such impartial witnesses, and

WHEREAS, These bills were passed by both houses of the General Assembly but all except that relating to criminal cases involving insanity were vetoed by the Governor, and

WHEREAS, The Ohio State Medical Association recognizes that such impartial witnesses are needed in both civil and criminal cases,

BE IT HEREBY RESOLVED, That The Ohio State Medical Association through the proper committee shall request the cooperation of The Ohio State Bar Association in reintroducing in the Ohio General Assembly those bills which were vetoed by the Governor in nineteen twenty-seven, and

BE IT FURTHER RESOLVED, That The Ohio State Medical Association request its constituent county societies and academies of medicine to support it in its efforts to secure the passage of such bills.

RESOLUTION L. INTRODUCED BY DR. JENNINGS:

Memorandum on Building Needs at Ohio State Sanatorium, Mt. Vernon, Ohio.

Legislative History—On April 23, 1902—An act was passed for a Commission to study the feasibility of erecting state sanatoria for tuberculosis patients in Ohio.

On April 21, 1904—An act created a Commission to purchase land, erect buildings, regulate admissions and provide a board of trustees to manage the Ohio State Sanatorium for Incipient Pulmonary Tuberculosis.

On April 29, 1908—An act provided further for the government of the Sanatorium and to regulate the admission of patients.

On May 9, 1919—An act regulated admissions to the State Sanatorium and provided for the payment of their expenses in same.

On March 17, 1925—An act provided for admissions of children to the State Sanatorium, regulated fees to be paid by patients and for the education of patients of school age.

When the Ohio State Sanatorium was dedicated and opened for the reception of patients on October 27, 1909, it was intended that the type of patients to be treated would be adults with incipient pulmonary types of tuberculosis. The function of the institution was conceived as being largely educational. Patients were to be received, instructed in the routine hygiene of living, then discharged to return home to become in turn instructors for other tuberculous individuals in the community.

Experience soon developed the fact that there was no method by which the early type of the disease could be definitely assured in the patients accepted for treatment. There has always been a varying percentage of infirmary type of patients in the institution. Moreover, there has been no way to prevent patients from developing other diseases while in the institution. As a consequence a very pressing need has been present from the outset for a separate building for the care and treatment of these classes of patients.

It is estimated that a fire-proof infirmary building of 30 bed capacity would make the administrative problem considerably lighter. Such a building constructed to harmonize with the present buildings at the Sanatorium together with complete equipment would require an expenditure of $60,000.00.

At the present date (May 1, 1930) there are available beds for the treatment of tuberculous patients to the number of 2293 in 23 counties. Thus 65 counties of the 88 counties in the state are dependent upon the beds at the Ohio State Sanatorium or upon the chance of vacancies in the 15 hospitals in the 23 counties. Ohio requires 2288 additional beds to meet the standard of one bed per annual death set-up by the National Tuberculosis Association.

In the 65 counties there are many cases of tuberculosis in children which if treated in time can be returned home in an arrested condition. Since there were no beds available except at the Ohio State Sanatorium for these counties provision was made in 1925 to permit the institution to take children. This section provided that "* * *and persons under twelve years of age suffering from tuberculosis in any of its forms or predisposed thereto* * *" may be admitted.

The law stated "*provision may be made for the care and treatment of children in a building or buildings separate and apart from the buildings*

used for adult patients. The superintendent shall provide for the education of children of school age admitted to the Sanatorium. The instruction so provided shall be directed by and be under the supervision of the county superintendent of schools in cooperation with the superintendent. The expense of such instruction shall be paid from the appropriations for the Sanatorium, and the director of public welfare shall include in his budget such amounts as may be required to cover such expense."

THEREFORE BE IT RESOLVED, That it is the belief of the O.S.M.A. that a fire-proof building constructed in harmony with the present buildings at the Ohio State Sanatorium for the care of tuberculous or predisposed children who would come largely from the 65 counties without present facilities, should have a capacity of 100 beds. The estimated cost of building and equipment is $300.000.00.

These two extensions to the facilities of the Ohio State Sanatorium have been requested repeatedly during the past ten or twelve years, but thus far without success. Such provision—infirmary and children's pavilion—would place our institution among the leading institutions of the country in its ability to render service to our unfortunate tuberculous citizens. An expenditure of $360,000.00 by the state would do much to advance the winning fight being waged on tuberculosis in Ohio.

Constitutional Amendments

President Freiberg called attention to the report of the committee on Constitutional Revision, as authorized by the House of Delegates at the 1929 Annual Meeting, and the reported recommendations and proposed amendments to the Constitution and By-Laws as prepared by the Committee on Constitutional Revision and published in the March, 1930, issue of *The Journal*, pages 235 to 249, inclusive. Reprints of those proposed amendments had been mailed several weeks ago to each of the delegates officially certified at that time. Additional reprints were distributed at this time by the Tellers and Judges of Election to each of the delegates in attendance at this meeting.

Upon separate motions duly seconded and carried, each of the proposed amendments as submitted by the committee on Constitutional Revision (published in the March, 1930, issue of *The Journal*) to the several Articles and Sections of the Constitution, and to the Chapters and Sections of the By-Laws, were adopted, including the amendment to Chapter V, Section 1, which was adopted by a vote of 57 to 9, and which takes from the House of Delegates Nominating Committee its previous duty to nominate three candidates for president-elect and places the election of the president-elect directly in the hands of the House of Delegates through nominations from the floor.

The proposed amendments for renumbering, and transposition of two Chapters and their respective Sections in the By-Laws was also adopted, as well as the proposal to change the words "annual session" to "annual meeting."

On motion duly seconded and carried, the report and recommendations of the committee on Constitutional Revision were then approved and adopted as a whole.

Announcement was made by the President that the amendments just adopted to the Constitution and By-Laws would be assembled and printed as a supplement to the *Ohio State Medical Journal* within the next two or three months.

Miscellaneous Business

Announcements were made by the chairmen of the various reference committees of the time and meeting places for the respective committees in order that members of the House of Delegates and other members interested might appear before the committees.

Additional business was called for and there being none presented, the House of Delegates adjourned to meet in Parlor C and D, Mezzanine Floor, Neil House, at 1:30 P. M., on the following day, May 14, 1930.

SECOND SESSION

The House of Delegates was called to order by President Freiberg at 1:30 P. M., Wednesday, May 14, 1930, in Parlor C and D, Mezzanine Floor, of the Neil House, for its second session during the Eighty-Fourth Annual Meeting of the Ohio State Medical Association.

Responses to roll call showed one hundred and two delegates and officers present. (For tabulation see page 531).

Annual Election

President Freiberg called attention to the effect of the constitutional amendment adopted at the preceding day's session, whereby nominations for the office of president-elect were to be made at this point in the proceedings from the floor (instead of nominations being submitted by the Nominating Committee as under previous provisions of the Constitution and By-Laws).

Nominations for the office of President-Elect being called for, Dr. Tritch nominated D. C. Houser, Urbana, for the office of President-Elect and called attention to his twenty-two years of service in the House of Delegates and his five years of service on the Council. This nomination was seconded by Dr. Stephens.

Dr. Bryant nominated for the office of President-Elect, E. M. Huston, Dayton, and called attention to Dr. Huston's interest and years of service in medical organization. This nomination was seconded by Dr. Jennings.

Further nominations being called for and there being none, ballots were distributed by the committee on Tellers and Judges of Election, collected, tabulated and announced as follows:

D. C. Houser—67 votes
E. M. Huston—17 votes

Upon motion by Dr. Jennings, seconded and

carried, the election of D. C. Houser as President-Elect of the Ohio State Medical Association was made unanimous.

Election of Councilors

Under the official order of business, the report of the Nominating Committee was submitted by Dr. Smith, Chairman, for the office of Councilor from the First, Third, Fifth, Seventh and Ninth Councilor Districts, the terms of the present incumbents expiring at this time:

First District Councilor Election

The Nominating Committee announced the following nomination for Councilor from the First District:—John A. Caldwell, Cincinnati.

There being no further nominations from the floor, on motion by Dr. Seibert, seconded by Dr. Jennings and carried, the secretary was instructed to cast the unanimous ballot of the House of Delegates for Dr. Caldwell, Cincinnati, for Councilor of the First District for a term of two years. So recorded and announced.

Third District Councilor Election

The Nominating Committee announced the following nomination for Councilor from the Third District:—O. P. Klotz, Findlay.

There being no further nominations from the floor, on motion by Dr. Dexter, seconded by Dr. Goodman and carried, the secretary was instructed to cast the unanimous ballot of the House of Delegates for Dr. Klotz, Findlay, for Councilor of the Third District for a term of two years. So recorded and announced.

Fifth District Councilor Election

The Nominating Committee announced the following nomination for Councilor from the Fifth District:—C. L. Cummer, Cleveland.

There being no further nominations from the floor, on motion by Dr. Follansbee, seconded by Dr. Marsh and carried, the secretary was instructed to cast the unanimous ballot of the House of Delegates for Dr. Cummer, Cleveland, for Councilor of the Fifth District for a term of two years. So recorded and announced.

Seventh District Councilor Election

The Nominating Committee announced the following nomination for Councilor from the Seventh District:—E. B. Shanley, New Philadelphia.

There being no further nominations from the floor, on motion by Dr. Miller, seconded by Dr. Boylan and carried, the secretary was instructed to cast the unanimous ballot of the House of Delegates for Dr. Shanley, New Philadelphia, for Councilor of the Seventh District for a term of two years. So recorded and announced.

Ninth District Councilor Election

The Nominating Committee announced the following nomination for Councilor from the Ninth District:—I. P. Seiler, Piketon.

There being no further nominations from the floor, on motion by Dr. Micklethwaite, seconded by Dr. Andre and carried, the secretary was instructed to cast the unanimous ballot of the House of Delegates for Dr. Seiler, Piketon, for Councilor of the Ninth District for a term of two years. So recorded and announced.

Second Councilor District

Dr. Smith, Chairman of the Nominating Committee, called attention to the vacancy in the councilorship from the Second District created by the election of D. C. Houser to the office of President-Elect, and whose unexpired term on the Council is to be filled by the House of Delegates at this time.

President Freiberg called for nominations for the office of Councilor from the Second District to fill the unexpired term ending at the Annual Meeting in 1931.

Dr. Huston nominated A. B. Brower, Dayton.

Dr. Davidson nominated E. M. Huston, Dayton.

Ballots were distributed, collected, tabulated and announced as follows:

E. M. Huston—41 votes.

A. B. Brower—40 votes.

The President announced the election of E. M. Huston as Councilor from the Second District for the term expiring at the Annual Meeting in 1931.

Election of A. M. A. Delegates

The Nominating Committee, through Dr. Smith, chairman, announced the nomination of the following delegates and alternates to the American Medical Association for a term of two years:

Wells Teachnor, Sr., Columbus, Delegate
D. H. Morgan, Akron, Alternate
Ben R. McClellan, Xenia, Delegate
A. C. Messeger, Xenia, Alternate
E. R. Brush, Zanesville, Delegate
H. S. Noble, St. Marys, Alternate
Geo. Edw. Follansbee, Cleveland, Delegate
C. L. Cummer, Cleveland, Alternate.

There being no nominations from the floor, on motion by Dr. Floyd, seconded by Dr. Hendershott and carried, the secretary was instructed to cast the unanimous ballot of the House for the nominations as made by the Nominating Committee. So recorded and announced.

Report of Reference Committees

The next order of business being the reports of the various committees appointed by the President at the first session of the House of Delegates, Dr. Jennings presented the report of the Committee on Addresses of the President and President-Elect.

Annual Addresses

Report of the Committee on the addresses of the President and President-Elect.

Your Committee in reviewing the annual address of the President, desires to recommend to the House of Delegates their hearty approval of

the sentiments expressed. The principals outlined portray much thought and study.

Several suggestions contained in the address deserve particular emphasis.

It is our opinion that the recommendation advising a Council Committee on conformity, that will bring about the necessary uniformity in the provisions of the Constitution of the component county organizations is particularly timely, and that it will further enhance our efficiency as a state organization.

The very clear expression of the need for leadership on the part of the physician in his attempt to solve the multitudinous problems which he faces deserves more than passing comment. Your committee feels that much more can be accomplished by properly directed activity and sound constructive planning than by calmly awaiting the impending catastrophe.

By such leadership and activity, on the part of the organized profession, many contingencies, and undesirable movements, can be avoided.

Your Committee, in reviewing the inaugural address of the incoming President, Dr. C. W. Waggoner has nothing but commendation for this very able and scholarly address. Of particular interest was the discussion on compensation, as received by the medical profession. The fact that we are left out of the family budget, can be charged to our own lack of aggressiveness, perhaps retarded by our intense ideas of ethics.

We are also particularly interested in the incoming President's comments on public health. The fact that there are too many misdirected and misplaced agencies operating under the guise of so-called health units or organizations. Also, the fact, as pointed out, that there should be a more harmonious association, and cooperation, of the official health agencies, and the physicians themselves.

Respectfully submitted,
LOUIS FEID, JR.
O. P. TATMAN,
F. C. ANDERSON,
H. V. PARYZEK,
GAINOR JENNINGS, *Chairman.*

On motion by Dr. Dexter, seconded by Dr. Burley and carried, the above report was accepted, approved and adopted.

Annual Reports

To the House of Delegates of the Ohio State Medical Association:

Your Committee on Annual Reports of Standing and Special Committees has the honor to report the following:

Your Committee has carefully reviewed the reports of the various Committees and has discussed at length the matters therein contained, and herewith submits its conclusions in regard to the several reports.

One. Report of the *Committee on Medical Economics* (combined with the report of the Special Committee on Socialized Medicine).

This report is a masterly document. The discussion of "Socialized" or "State Medicine" which it contains is clear and sound, and the attitude of the report upon the definition and limitation of "State Medicine" is explicit. For the sake of record this definition is quoted in full. It states "That any plan or system which affects the medical profession detrimentally will inevitably be detrimental to the public as well. Any plan, system or activity which tends to destroy or lessen scientific research, individual initiative and ambition, adequate remuneration for effort and ability, scientific independence, reasonable competition, personal responsibility which would lower the standards of medical education and inculcate unsound ideas in the public mind towards scientific medicine, are wrong, unwise, impractical and will eventually be doubly costly to the public."

In this pronouncement of policy, your reference Committee most enthusiastically concurs. The section of this report which deals with the question of occupational diseases is especially cogent, and the recommendation of the report in regard to future legislation on compensable occupational diseases should be supported to the full by this Association. Contract practice, the cost of medical care and certain phases of laboratory service receive wise criticism, and constructive suggestion. The report describes present trends clearly, urges careful thinking on these complex problems and concerted action to meet the rapidly changing conditions which beset the medical practice of today. Congratulations are due to the Committee whence this report arises. It points the way which we must follow.

Two. Report of the *Committee on Public Policy.*

The report clearly demonstrates that the interests of this Association have been conserved, and that activities unfavorable to its best interests have been closely watched and carefully analyzed. The report stresses the importance of extending and strengthening contacts, and of cooperating with other groups and agencies on problems which are common to both. Noteworthy is the combined study entered into with the Ohio State Pharmaceutical Association, to the end that a better understanding can be maintained between the doctor and the pharmacist. The keynote of this report is unfailing watchfulness, wise negotiation, helpful cooperation with other agencies, and firm support and control of matters pertaining to the public health. The report reflects accomplishment of which the membership of this Association may well be proud.

Three. The Report of the *Publication Committee* sets forth the ideals and accomplishments of the Editorial Board of *The Journal* in regard to the editing and publishing of this important organ of our Association, and describes the care with which the editorial functions are carried out. Your reference Committee believes that the Publication Committee has administered the affairs of *The Journal* with success, and has presented to the membership a worthy publication, which contains important information both scientific and organizational, conscientiously edited and carefully and acceptably printed.

Four. Report of the *Committee on Medical Defense.*

The purposes of this report are succinctly set forth as follows:

"1. To stress some of the common causes of malpractice suits.

2. To point out to the membership of the State Association how to guard against and prevent suits or threats, both against themselves and against their colleagues.

3. To instruct physicians as to what steps to take if sued."

Clear cut, logical and practical, the report explains what to do to avoid suit, how to proceed if suit threatens, and how to conduct oneself and one's practice so that one may be eligible for defense by the Association. In an interesting manner the report discusses the operation of the Medical Defense Program from the year 1916 to the present, demonstrating further, though further demonstration is unnecessary, how sound and how valuable has been the work of this Com-

mittee, and of Dr. J. E. Tuckerman, its perennial chairman.

Five. Report of *Committee on Medical Education and Hospitals.*

A carefully prepared report containing much interesting and suggestive matter in regard to medical education in general, postgraduate study, and the hospital situation in Ohio. The report shows careful and painstaking study; especially timely is the plea for greater emphasis upon, and wider opportunity for post graduate study in this State. Upon practical grounds, your reference committee finds that it cannot agree with the suggestion that "an effort be made by our medical schools to encourage, and if possible to require each undergraduate medical student to place himself under the tutelage of an approved general practitioner during vacation periods, for clinical experience as well as to acquaint himself with the economic and social relationship between the practicing physician and his clientele." Valuable as such an experience might be for the student, the detail required in choosing practitioners qualified for this work and in checking the work of both perceptor and student seem to be insuperable obstacles to such a procedure.

Six. Report of the *Special Committee on Periodic Health Examinations.*

This report is an appeal to the medical profession at large to sponsor the cause of the periodic health examination as an important factor in the improvement of the public health. It contains an analysis of the advantages of the periodic examination to both patient and physician, and states very fairly some of the possible disadvantages to one or the other which may arise. Your reference Committee is heartily in accord with the belief that the periodic health examination should succeed in making possible the early discovery and elimination of diseases or defects. On the other hand, it is our opinion that to educate the public at large, to report annually for an audit of its physical condition, will take mountains of propaganda, and years of propagandizing. If sufficient funds, backed by unfailing enthusiasm, can be exhibited over a long enough period of time, the periodic health examination may come to be an established means for the improvement of the public health. The movement to establish firmly the habit of the periodic health examination should be supported by this Association.

Seven. Report of the *Committee on Auditing and Appropriations.*

The report amply demonstrates how wisely and carefully the funds of the Association have been administered. Your reference Committee agrees entirely with the statement in this report "that under the funds available, the income derived and the amount expended, medical organization in Ohio has accomplished more and been of greater service to its membership on nominal dues than any similar organization anywhere." The report predicts that the time is not far off, when the dues must be raised in order that the work of this great organization shall continue, and it seems sure that when that time arrives, the constituent societies will meet the increased demand with readiness, in the full assurance that the funds will be wisely administered.

Eight. Report of the *Special Committee on Mental Hygiene.*

The report sets forth plainly and tersely the fact that Ohio has lagged behind in her provision for the care of the mentally diseased and defective, a fact recognized and deplored by us all. The report, however, strikes a note of hope for the future in its description of the expanding program aimed to remedy the defects of the present situation. The report closes with a timely appeal for greater interest and increased cooperation on the part of the profession at large in regard to the problems incident to the care and rehabilitation of the mentally diseased. The Association should do all in its power to aid and to further the development of the program outlined in this report.

Nine. Report of the *Special Committee on Military Affairs.*

The report describes the liaison between this Committee and the War Department. Obviously a sound medical Reserve Corps exists in the State, largely due to the activities of your committee on Military Affairs. It is emphasized that physicians of military age, who contemplate serving with the colors in time of war, should prepare themselves by joining the Reserve Corps, and benefiting by the training given to Reserve Officers. Your reference Committee agrees that physicians of military age should seriously consider the advisability of becoming members of the Reserve Corps.

Ten. Annual *Report of the Councilors.*

A brief report which merely suggests the work of the officers and council of this organization. Modestly are set forth the aims and ideals which have guided these men in the administration of our affairs. In it, however, we can read between the lines with what wisdom, sympathy and energy the work of the Council has been carried on. Your reference Committee wishes to felicitate the officers and Council on the successful administration of their duties and to assure them of the appreciation and support of the Association.

In conclusion, your reference Committee desires to go on record as believing that the reports of the Standing and Special Committees demonstrate a deep interest and a thorough grasp of the problems of organized medicine in this State. The reports are without exception well presented, and show mature thought, sound action, and infinite attention to the detail of the business in hand.

Respectfully submitted,
Committee on Reports of Standing and Special Committees.
B. H. BLAIR,
C. U. HANNA,
C. K. STARTZMAN,
C. R. STEINKE,
RICHARD DEXTER, *Chairman.*

On motion by Dr. Dexter, seconded by Dr. Burley and carried, the above report was accepted, approved and adopted.

Report of Committee on Resolutions

Dr. Bowman, the Chairman, on behalf of his Committee on Resolutions, presented the following:

To the Members of the House of Delegates,
Assembled at the 84th Annual Meeting of the
Ohio State Medical Association:
Gentlemen:

Your Committee on Resolutions submits the following as its unanimous report:

The Committee (with the following members present, E. L. Crum, Lodi; E. M. Ickes, Fremont; C. I. Stephens, Ansonia, and J. Craig Bowman, Upper Sandusky, Chairman), was in session for several hours on Tuesday afternoon,

May 12, following the session of the House of Delegates in the morning, at which time twelve resolutions were introduced and submitted to this Committee for consideration. Authors of several of these resolutions and other interested delegates and members appeared before our committee on Tuesday afternoon in behalf of or in opposition to various provisions of the resolutions as submitted.

These resolutions will be considered in the order of their introduction:

RESOLUTION A

Introduced by J. E. Tuckerman (Cuyahoga County) proposes the enunciation of an important and fundamental policy governing the relation of medical organization to outside agencies. Our committee considers this resolution as unusually important and recommends its approval by the House of Delegates as introduced:

WHEREAS, The Ohio State Medical Association, representing organized medicine and the large majority of the medical profession of Ohio, has on numerous occasions been requested and urged to officially approve or endorse outside, independent agencies, associations and organizations interested in the fields of public health and public welfare, in each of which the medical profession is vitally interested, and

WHEREAS, The granting of such approval or endorsement would be construed as a sanction and acquiescence of medical organization in any activities or any policy that might be pursued by such agencies, organizations or associations, although medical organization might not contemplate or have any control over its future development, alliances and programs, and

WHEREAS, Such approval and endorsement might at some future date place medical organization in the embarrassing position of being technically allied with agencies, organizations or associations whose activities in the future might be questionable and opposed to the principles and policies of the medical profession and of medical organization, therefore,

BE IT RESOLVED, That the House of Delegates of the Ohio State Medical Association at the eighty-fourth annual meeting of the State Association, May 13, 14 and 15, 1930, Columbus, Ohio, disapprove of any action by the officers, Council, and standing and special committees of the Ohio State Medical Association which might be construed as placing the State Association officially on record as approving or endorsing any outside independent agency, organization or association over which medical organization does not have direct guidance;

HOWEVER, BE IT FURTHER RESOLVED, That the House of Delegates sanction and recommend the cooperation of the Council with individuals and agencies, organizations and associations on definite programs which are in accordance with well established policies of medical organization and with activities which have met the approval of the medical profession generally.

On motion by Dr. Bowman, seconded by Dr. Wright and carried, Resolution A was accepted, approved and adopted.

RESOLUTION B

While the Committee on Resolutions was sympathetic to the intent of Resolution B, introduced by S. J. Goodman, Secretary of the Council, on behalf of the Council, condemning food fads and exaggerated and distorted claims of faddists and propagandists in this field, the Committee believes that the House of Delegates should refrain from any official expression of professional opinion on scientific subjects or the declaration of scientific opinions which properly belong in our scientific sections and which are matters of individual and sometimes variable opinion.

The committee on Resolutions therefore recommends the disapproval of Resolution B, for the reasons above stated.

On motion by Dr. Bowman, seconded by Dr. DeWitt and carried, the foregoing section of the report pertaining to Resolution B was adopted.

RESOLUTION C

Not only members of the medical profession, but the public generally, have become disgusted with some of the fraudulent and destructive propaganda being broadcast on a commercial basis through a few of the radio broadcasting stations.

The Resolutions Committee therefore approves and recommends to the House of Delegates the adoption of Resolution C, as introduced by Otto Seibert (Hamilton County) as follows:

WHEREAS, The health and welfare of the public is being menaced to an alarming degree by the pernicious propaganda being issued over the radio by medical quacks and unscrupulous commercial healing concerns, and

WHEREAS, numerous charlatans have found the radio a medium of activity for the distribution of dangerous and harmful advertisements, exploiting worthless patent medicines, alleged remedies and pseudo scientific treatment methods, and

WHEREAS, a nation-wide campaign has been launched to exclude from the air the obnoxious propaganda of quacks and imposters, through cooperative agreements between medical and health authorities, operators of broadcasting stations, better business bureaus and governmental agencies,

BE IT RESOLVED, That the Ohio State Medical Association at its eighty-fourth annual meeting, May 13-15, 1930, at Columbus, Ohio, approve of the efforts now being made to drive health imposters from the air and recommend that the component county medical societies of the state cooperate in this meritorious campaign by taking an active interest in steps which may be taken by local authorities or federal officials in stopping the distribution of injurious and detrimental medical and health propaganda.

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to the Federal Radio Commission which is empowered to revoke the license of any broadcasting station that is not serving the public interest, convenience or necessity.

On motion by Dr. Bowman, seconded by Dr.

McDougall and carried, Resolution C was accepted, approved and adopted.

RESOLUTION D

The committee gave serious and thoughtful attention to Resolution D, introduced by H. S. Davidson (Summit County) pertaining to the problems of physicians in private competitive medical practice in cases coming under the Ohio Workmen's Compensation Law.

This committee felt, however, that the wording of this resolution as introduced might not express the concerted opinion of the hundreds of physicians having dealings with the Industrial Commission.

The committee therefore recommends a substitute resolution as follows:

WHEREAS, It is important that a thorough study be made of the relation of the Workmen's Compensation Law to the private practice of medicine, therefore be it

RESOLVED, That the House of Delegates of the Ohio State Medical Association at the 84th Annual Meeting, Columbus, Ohio, May 13, 1930, respectfully asks that the Council appoint a subcommittee of the Medical Economics Committee that shall immediately start a study of this question and continue to perform as a means of contact with the Ohio Industrial Commission and the Ohio State Medical Association.

BE IT RESOLVED, That the House of Delegates urge the formation of the above suggested committee and that the Council and officials of the Ohio State Medical Association are hereby urged to cooperate with this committee to the end that a better understanding shall be had between the medical profession and the Ohio Industrial Commission.

On motion by Dr. Bowman, seconded by Dr. Hanna, Resolution D, as reworded and recommended by the committee was accepted, approved and adopted.

RESOLUTION E

Resolution E, introduced by D. W. Stevenson (Summit County) pertaining to medical as well as administrative problems in relation to narcotics, was considered at length by the committee. The wording of the resolution as introduced was modified and a substitute resolution recommended by this committee as follows:

WHEREAS, Through violation of slight technical errors, some physicians have been prosecuted and fined by Federal authorities and whereas recently a physician (seventy-one years of age and a member of the State Association for years) was imprisoned in the Canton workhouse for nine months for dispensing tablets to an addict employed as a detective, and

WHEREAS, The Government does not furnish adequate hospitalization or sanitorium facilities for the treatment of narcotic addicts, but has issued a technical ruling that an ambulatory addict must not be given a prescription for reduction treatment, and both druggists and doctors have been fined in such cases; thus resulting in incarceration in penal institutions for unfortunate addicts rather than scientific treatment, therefore be it

RESOLVED, That the President of the State Association appoint a committee to consider such cases and problems and inform the members, through *The Journal*, as to the peculiar technical points which must be observed, such committee with the aid of Council to consider possible remedial legislation and the issuance of more fair and humanitarian regulations. Furthermore that the delegates to the American Medical Association at Detroit be asked to bring this matter to the attention of the A. M. A.

On motion by Dr. Bowman, seconded by Dr. Stevenson and carried, Resolution E as reworded and recommended by the committee was accepted, approved and adopted.

RESOLUTION F

In view of the opinion and recommended policy in relation to the subject matter of Resolution B, wherein this committee recommends that the House of Delegates refrain from the expression of scientific opinion, believing that the House of Delegates should confine itself to the legislative, administrative and business details of medical organization, and with the consent of the author, D. W. Stevenson (Summit County) Resolution F, also relating to foods and diets was withdrawn. This committee therefore recommends no action on Resolution F as introduced.

On motion by Dr. Bowman, seconded by Dr. Waltz, the foregoing recommendation of the committee, pertaining to Resolution F, was adopted.

RESOLUTION G

This resolution introduced by Gilbert Mickelthwaite (Scioto County) is a reaffirmation and reemphasis of policies previously pronounced by this House of Delegates and by the medical profession generally and is recommended for adoption as introduced and as follows:

WHEREAS, Organized attempts are now underway through legislation in the Congress of the United States to revive the maternity and infancy activities of the Federal Government as previously carried on under the provisions of the Sheppard-Towner Maternity Act, and

WHEREAS, The proposed legislation is similar to the original Sheppard-Towner Act, and

WHEREAS, It has been demonstrated generally since the expiration of that act on June 30, 1929, that the states are quite capable of, and are, carrying on under their own direction and by the use of their own funds, efficient educational work in the fields of maternal and child hygiene,

BE IT RESOLVED, That the Ohio State Medical Association in annual meeting, May 13, 14 and 15, 1930, at Columbus, Ohio, reaffirm the policy laid down previously by the House of Delegates disapproving paternalistic, socialistic, bureaucratic, impractical or extravagant legislation as exemplified by the original Sheppard-Towner Act and the maternity and infancy legislation now pending in Congress.

BE IT FURTHER RESOLVED, That copies of this resolution be sent to the members of the Ohio Congressional delegation.

On motion by Dr. Bowman, seconded by Dr. Basinger, Resolution G was accepted, approved and adopted.

RESOLUTION H

Our Committee was impressed with the seriousness and importance of economics and professional problems referred to in Resolution H, as introduced by E. M. Huston (Montgomery County) but felt that it was impractical for medical organization to attempt to supervise, regulate and control the relationship of employment of its individual members in their private practice, or to require such members to conform to inflexible, standard regulations governing contract practice.

This committee is mindful of the rapid and changing developments in society, in government and in the relationship of practicing physicians to their patients, as individuals and as groups, and feels that the Council, Medical Economics Committee, Policy Committee, and other officers and committees charged with responsibilities in this broad field, should give serious attention to such developments and report upon and recommend from time to time the attitude which should be adhered to under our fundamental principles of ethics.

Because of the impractical and unworkable provisions recommended in Resolution H, this committee recommends its disapproval by the House of Delegates.

On motion by Dr. Bowman, seconded by Dr. Dexter and carried, the foregoing section of the report and recommendations of the committee pertaining to Resolution H were adopted.

RESOLUTION I

Introduced by H. V. Paryzek (Cuyahoga County) expresses the natural and proper interest of the medical profession in problems of health, welfare and safety. It recommends action by this House of Delegates in relation to the recent appalling disaster at the Ohio Penitentiary and pledges interest and service in avoiding similar tragedies in state welfare, penal, correctional and mental hygiene institutions.

This committee believes, however, that public officials, charged with definite responsibilities, should not be embarrassed by any definite recommendations at this time from organizations such as ours, although our Association and our members, individually, are willing, as always, to serve when called upon for advice, assistance and action in these matters.

For the reasons set forth above, this committee recommends that Resolution I not be adopted.

On motion by Dr. Bowman, seconded by Dr. Crum and carried, the foregoing report and recommendations of the committee pertaining to Resolution I were adopted.

RESOLUTION J

The Resolutions Committee was keenly impressed with the importance of the problems set forth in the resolution and report J, introduced by S. J. Goodman, Secretary of the Council, on behalf of the Council, pertaining to preventive medicine, public health administration, and vaccination.

The constant and constructive activity of physicians generally in measures promoting public health, preventive medicine and the control of communicable diseases is apparent to each of us, as physicians, who are charged with serious responsibilities not only to our individual patients, but society at large.

The resolution and report adopted by the Council of our State Association on Monday, May 12, and introduced into the House of Delegates at yesterday morning's session, is hereby submitted to the House of Delegates for its information, consideration and action as introduced and as follows:

WHEREAS, The Council of the Ohio State Medical Association considers it of utmost importance that due emphasis always be placed upon the measures which modern preventive medicine has shown to be of unquestioned value and especially such as vaccination against smallpox, and

WHEREAS, It becomes most difficult to secure the adoption of such preventive measures unless local health boards may speak with authority and may rely upon the support of the State Department of Health and all other health agencies, both official and unofficial, when they have the cooperation of the local medical profession,

THEREFORE, BE IT RESOLVED, That the Council of the Ohio State Medical Association approve the recommendation of the Committee on Public Policy concerning the situation in Tiffin as incorporated in the appended report of the Policy Committee as follows:

> The Policy Committee reports to the Council of the Ohio State Medical Association that a hearing was held May 12, 1930, regarding the complaint of the Board of Health of Tiffin involving the attitude of the State Department of Health towards the efforts to check the threatened epidemic of smallpox by bringing about vaccination among the school children of the city. Dr. Neal, state director of health, was heard and supported the action of the representative of his department. It is the opinion of the Policy Committee that the Tiffin Board of Health took the proper measures under the circumstances and this committee deplores the action on the part of the State Department of Health which appears to have had the effect of weakening the influence of the local Board of Health in that community.

Signed: J. H. J. Upham, Chairman; John B. Alcorn, A. H. Freiberg, C. W. Waggoner and H. S. Davidson, members of the Policy Committee.

Signed: Council of the Ohio State Medical Association by:

S. J. GOODMAN, M.D.,
Secretary of Council.

On motion by Dr. Bowman, seconded by Dr. Slosser and carried, the foregoing resolution and

OHIO STATE MEDICAL ASSOCIATION

Officers 1930-1931

PRESIDENT
C. W. Waggoner, M.D. ..... Toledo

PRESIDENT-ELECT
D. C. Houser, M.D. ..... Urbana

TREASURER
H. M. Platter, M.D. ..... Columbus

EXECUTIVE SECRETARY
Don K. Martin ..... Columbus

State Council

FIRST DISTRICT
John A. Caldwell, M.D. ..... Cincinnati

SECOND DISTRICT
E. M. Huston, M.D. ..... Dayton

THIRD DISTRICT
O. P. Klotz, M.D. ..... Findlay

FOURTH DISTRICT
D. J. Slosser, M.D. ..... Defiance

FIFTH DISTRICT
C. L. Cummer, M.D. ..... Cleveland

SIXTH DISTRICT
D. W. Stevenson, M.D. ..... Akron

SEVENTH DISTRICT
E. B. Shanley, M.D. ..... New Philadelphia

EIGHTH DISTRICT
E. R. Brush, M.D. ..... Zanesville

NINTH DISTRICT
I. P. Seiler, M.D. ..... Piketon

TENTH DISTRICT
S. J. Goodman, M.D. ..... Columbus

EX-OFFICIO, THE EX-PRESIDENT
Albert H. Freiberg, M.D. ..... Cincinnati

STANDING COMMITTEES
(Constitutional)

PUBLIC POLICY

John B. Alcorn, Chairman, (1933) Columbus
J. H. J. Upham, (1931) ..... Columbus
H. S. Davidson, (1932) ..... Akron
C. W. Waggoner, (ex-officio) ..... Toledo
D. C. Houser, (ex-officio) ..... Urbana

PUBLICATION

Andrews Rogers, Chairman (1931) Columbus
Gilbert Micklethwaite, (1932) ..... Portsmouth
A. B. Denison, (1933) ..... Cleveland

MEDICAL DEFENSE

J. E. Tuckerman, Chairman, (1931) Cleveland
F. P. Anzinger, (1932) ..... Springfield
W. H. Snyder, (1933) ..... Toledo

MEDICAL EDUCATION AND HOSPITALS

Ben R. McClellan, Chairman, (1931) Xenia
R. H. Birge, (1932) ..... Cleveland
John F. Wright, (1933) ..... Toledo

MEDICAL ECONOMICS

J. Craig Bowman, Chairman, (1933) Upper Sandusky
Geo. Edw. Follansbee, (1931) ..... Cleveland
E. O. Smith, (1932) ..... Cincinnati

SECTION OFFICERS FOR 1930-1931

MEDICINE

Julien E. Benjamin ..... Chairman
19 W. Eighth St., Cincinnati
Leo C. Bean ..... Secretary
Gallipolis

SURGERY

Fred M. Douglass ..... Chairman
421 Michigan St., Toledo
M. E. Blahd ..... Secretary
3912 Prospect Ave., Cleveland

OBSTETRICS AND PEDIATRICS

Wayne Brehm ..... Chairman
683 E. Broad St., Columbus
Jacob V. Greenebaum ..... Secretary
19 W. Eighth St., Cincinnati

EYE, EAR, NOSE AND THROAT

J. W. Millette ..... Chairman
117 S. Main St., Dayton
A. L. Brown ..... Secretary
2700 Union Central Bldg., Cincinnati

NERVOUS AND MENTAL DISEASES

Louis J. Karnosh ..... Chairman
City Hospital, Cleveland
John D. O'Brien ..... Secretary
332 Market Ave. N., Canton

PUBLIC HEALTH AND INDUSTRIAL MEDICINE

J. F. Elder ..... Chairman
Court House, Youngstown
Geo. F. Sykes ..... Secretary
White Motor Company, Cleveland

Delegates and Alternates to American Medical Association

DELEGATES		ALTERNATES	
J. P. DeWitt (1931)	Canton	G. F. Zinninger (1931)	Canton
C. E. Kiely (1931)	Cincinnati	L. H. Schriver (1931)	Cincinnati
C. W. Waggoner (1931)	Toledo	J. L. Henry (1931)	Athens
Wells Teachnor, Sr. (1932)	Columbus	D. H. Morgan (1932)	Akron
Ben R. McClellan (1932)	Xenia	A. C. Messenger (1932)	Xenia
E. R. Brush (1932)	Zanesville	H. S. Noble (1932)	St. Marys
Geo. Edw. Follansbee (1932)	Cleveland	C. L. Cummer (1932)	Cleveland

Annual Meeting, A.M.A., Detroit, Michigan, June 23 to 27, 1930

report as recommended was accepted, approved and adopted.

RESOLUTION K

This resolution introduced by Richard Dexter (Cuyahoga County) is self-explanatory, apparently non-controversial, and constitutes a reaffirmation of interest and policy previously expressed and is recommended for adoption as introduced and as follows:

WHEREAS, The Ohio State Medical Association has already put itself on record as approving the appointment of impartial expert witneses by the court at the request of either party to a suit, and

WHEREAS, In nineteen twenty-seven The Ohio State Medical Association and The Ohio State Bar Association introduced into the Ohio General Assembly three bills which would make possible the appointment of such impartial witnesses, and

WHEREAS, These bills were passed by both houses of the General Assembly but all except that relating to criminal cases involving insanity were vetoed by the Governor, and

WHEREAS, The Ohio State Medical Association recognizes that such impartial witnesses are needed in both civil and criminal cases,

BE IT HEREBY RESOLVED, That The Ohio State Medical Association through the proper committee shall request the cooperation of The Ohio State Bar Association in reintroducing in the Ohio General Assembly those bills which were vetoed by the Governor in nineteen twenty-seven, and

BE IT FURTHER RESOLVED, That The Ohio State Medical Association request its constituent county societies and academies of medicine to support it in its efforts to secure the passage of such bills.

On motion by Dr. Bowman, seconded by Dr. Follansbee, Resolution K was accepted, approved and adopted.

RESOLUTION L

A rather lengthy historical document concerning the Ohio State Sanitorium at Mt. Vernon, Ohio, and recommending support of a proposed extension and building program at that institution was introduced by Gainor Jennings (Miami County).

The medical profession and medical organization has always been interested in and were the originators and promoters of measures for the prevention, control and treatment of tuberculosis, and have always been sympathetic to practical and constructive measures in this field.

This committee feels, however, that the apparent intent of the report in Resolution L involves complicated problems in policy, legislation, future appropriations and official administration with many angles on which this committee did not have complete information in the limited time at its disposal, and because of the complicated question of public buildings and public expenditures, the committee felt that it is not justified in recommending for adoption the detailed report not presented in resolution form.

On motion by Dr. Bowman, seconded by Dr. Dexter and carried, the House of Delegates adopted the recommendations of the Committee in disapproving Resolution L.

On motion by Dr. Tuckerman, seconded by Dr. Thomas and carried, the recommendations and report of the committee on Resolutions were adopted by the House of Delegates as a whole and as amended in the foregoing transactions.

Selection of the Meeting Place for 1931

On behalf of the Summit County Medical Society and the City of Akron, through letters from public officials and others, Dr. Davidson extended an invitation for the State Association to hold its 1931 Annual Meeting in Akron.

This invitation was seconded by Dr. Wright, who pointed out, on behalf of the Toledo Academy of Medicine, that the medical profession of the city of Toledo would have been very glad to have entertained the 1931 Annual Meeting, but in view of the previous invitation from Akron (announced a year in advance at the 1929 Annual Meeting), that Toledo would withdraw its intended invitation and retire in favor of Akron.

There being no other invitations or motions for the 1931 meeting to be held elsewhere, on being put to a vote, Akron was selected as the 1931 Annual Meeting place.

Installation of Officers

Under the order of business, Dr. Freiberg, as his last official act, before retiring as President and inaugurating Dr. Waggoner to the Presidency from the office of President-Elect, expressed his earnest appreciation to the House of Delegates for its faithful service and reiterated his appreciation and commendation to the council, committees, county society officers, and members at large, for splendid cooperation during his term as President.

In complimentary terms, Dr. Freiberg then called attention to organization experience, spirit of willingness to serve, and earnestness of Dr. Waggoner and officially installed him as the President for the ensuing year by presenting to him the official gavel of the State Association.

On being installed, Dr. Waggoner expressed his appreciation and announced his effort to serve to the best of his ability during the year and solicited the support and cooperation of the membership.

Appointment and Confirmation of Standing Committees

Under the next order of business, as his first official act, President Waggoner, in conformity to Chapter IX, Section 1, of the By-Laws, announced the appointment of one member each on the stand-

ing committees, for a term of three years, as follows:

Public Policy:
John B. Alcorn, Columbus.

Publication:
A. B. Denison, Cleveland.

Medical Defense:
W. H. Snyder, Toledo.

Medical Education and Hospitals:
John F. Wright, Toledo.

Medical Economics:
J. Craig Bowman, Upper Sandusky.

Upon motion by Dr. Follansbee, seconded by Dr. Kiely and carried, the House of Delegates concurred in the foregoing appointments.

Dr. Waggoner then announced the complete personnel of the standing committees under the constitution, including the hold-over members, the year in which the terms of members expire, and the chairman designation, as follows:

Committee on Public Policy:
John B. Alcorn, Chairman, (1933), Columbus; J. H. J. Upham, (1931), Columbus; H. S. Davidson, (1932), Akron; C. W. Waggoner, (Ex-officio), Toledo; D. C. Houser, (Ex-officio), Urbana.

Publication Committee:
Andrews Rogers, Chairman, (1931), Columbus; Gilbert Micklethwaite, (1932), Portsmouth; A. B. Denison, (1933), Cleveland.

Medical Defense:
J. E. Tuckerman, Chairman, (1931), Cleveland; F. P. Anzinger, (1932), Springfield; W. H. Snyder, (1933), Toledo.

Medical Education and Hospitals:
Ben R. McClellan, Chairman, (1931), Xenia; R. H. Birge, (1932), Cleveland; John F. Wright, (1933), Toledo.

Medical Economics:
J. Craig Bowman, Chairman, (1933), Upper Sandusky; Geo. Edw. Follansbee, (1931), Cleveland; E. O. Smith, (1932), Cincinnati.

Introduction of President-Elect

Attention was called to the return to the room of Dr. Houser, newly elected President-elect. President Waggoner congratulated Dr. Houser and introduced him to the delegates. In an earnest expression of appreciation for the honor accorded him and of his desire to serve faithfully, Dr. Houser summarized the value and effectiveness of medical organization with emphasis on "loyalty." He paid a tribute to the membership, the rank and file which makes organization possible, to the delegates, the councilors, the committees, the past-presidents, and the effective local units through the county societies.

Words of Appreciation

On motion by Dr. Stone, seconded by Dr. McClung and carried, the House of Delegates, on behalf of the members of the State Association, officially expressed appreciation to the Columbus Academy of Medicine, its local committees on arrangements, the Columbus newspapers, and the city of Columbus for making possible the success and pleasure of the 1930 Annual Meeting.

Upon motion by Dr. Dexter, seconded by Dr. Bowman and carried, the House of Delegates expressed its approval and appreciation of the faithful and efficient services of Executive Secretary Martin, and the headquarters staff.

Further business being called for and there being none presented, the House of Delegates, upon motion, adjourned to the Eighty-Fifth Annual Meeting, to be held in Akron in 1931, the dates to be set by the Council as authorized under the Constitution.

Attest: DON K. MARTIN,
Executive Secretary.

House of Delegates Roll Call

County	Delegate	First Session	Second Session
Adams	O. T. Sproull	present	present
Allen	H. L. Basinger	present	present
Ashland	W. F. Emery		present
Ashtabula	R. B. Wynkoop		present
Athens	C. S. McDougall	present	present
Auglaize	C. P. McKee		
Belmont	E. C. Cope	present	present
Brown	Geo. P. Tyler		present
Butler	W. E. Griffith	present	present
Champaign	Mark Houston		
Clark	J. H. Poulton	present	present
Clermont	Thos. Longworth		present
Clinton	E. Briggs		present
Columbiana	J. A. Fraser		present
Coshocton	D. M. Criswell		present
Crawford	W. L. Yeomans		present
Cuyahoga	R. H. Birge	present	present
"	Richard Dexter	present	present
"	Geo. Edw. Follansbee	present	present
"	P. A. Jacobs	present	present
"	H. V. Paryzek	present	present
"	V. C. Rowland	present	present
"	J. E. Tuckerman	present	present
"	C. D. Waltz	present	present
Darke	C. I. Stephens	present	present
Defiance	George DeMuth	present	present
Delaware	H. E. Caldwell		
Erie	F. M. Houghtaling		present
Fairfield	Ralph Smith	present	present
Fayette	Don C. Gaskins		present
Franklin	I. B. Harris		present
"	J. Quinn Dorgan	present	
"	J. H. J. Upham	present	present
"	J. B. Alcorn	present	present
"	J. M. Thomas	present	present
Fulton			
Gallia	S. L. Gossard	present	present
Geauga	C. F. Gilmore		present
Greene	R. H. Grube		present
Guernsey	B. A. Souders	present	present
Hamilton	E. O. Smith	present	present
"	H. B. Freiberg	present	present
"	J. V. Greenebaum	present	present
"	Otto Seibert	present	present
"	Louis Feid	present	
"	C. E. Kiely	present	present
Hancock	J. C. Tritch	present	present
Hardin	G. S. Wilcox		
Harrison	E. L. Miller	present	present
Henry	T. P. Delventhal		

County	Delegate	First Session	Second Session
Highland	H. W. Chaney	.....	present
Hocking	M. H. Cherrington	.....	present
Holmes	J. C. Elder	.....	present
Huron	.....	.....	.....
Jackson	J. J. McClung	.....	present
Jefferson	J. C. M. Floyd	present	present
Knox	F. C. Anderson	present	present
Lake	V. N. Marsh	present	present
Lawrence	O. U. O'Neill	.....	.....
Licking	E. A. Moore	present	.....
Logan	C. K. Startzman	present	present
Lorain	S. V. Burley	present	present
Lucas	E. G. Galbraith	present	present
"	E. J. McCormick	present	present
"	Charles Lukens	present	present
"	J. F. Wright	present	present
Madison	R. H. Trimble	present	present
Mahoning	E. R. Thomas	present	.....
"	M. E. Hayes	.....	.....
Marion	R. T. Morgan	present	.....
Medina	E. L. Crum	present	present
Meigs	P. A. Jividen	present	present
Mercer	L. M. Otis	.....	.....
Miami	Gainor Jennings	present	present
Monroe	.....	.....	.....
Montgomery	E. M. Huston	present	present
"	A. O. Peters	present	present
"	W. B. Bryant	present	present
Morgan	Lee Humphrey	.....	present
Morrow	Todd Caris	.....	present
Muskingum	C. U. Hanna	present	present
Noble	.....	.....	.....
Ottawa	H. J. Pool	present	present
Paulding	L. R. Fast	.....	.....
Perry	C. B. McDougall	.....	.....
Pickaway	D. V. Courtright	present	present
Pike	R. M. Andre	present	present
Portage	L. A. Woolf	.....	.....
Preble	J. I. Nisbet	present	.....
Putnam	H. A. Neiswander	.....	present
Richland	George Smith	.....	present
Ross	O. P. Tatman	present	present
Sandusky	E. M. Ickes	present	present
Scioto	Gilbert Micklethwaite	present	present
Seneca	R. R. Hendershott	present	present
Shelby	F. R. McVey	.....	present
Stark	J. P. DeWitt	present	present
"	M. E. Scott	.....	.....
Summit	H. S. Davidson	present	present
"	C. R. Steinke	present	present
"	J. H. Weber	.....	present
Trumbull	Ralph Herlinger	present	.....
Tuscarawas	C. J. Miller	present	present
Union	J. D. Boylan	present	present
Van Wert	Paul Fishbaugh	.....	present
Vinton	H. S. James	.....	.....
Warren	B. H. Blair	present	present
Washington	J. F. Weber	present	present
Wayne	J. B. Patterson	present	present
Williams	J. A. Weitz	present	present
Wood	E. A. Powell	present	present
Wyandot	J. Craig Bowman	present	present
	OFFICERS		
President	Albert H. Freiberg	present	present
President-Elect	C. W. Waggoner	present	present
Ex-President	C. W. Stone	present	present
Treasurer	H. M. Platter	present	present
	COUNCILORS		
First District	John A. Caldwell	present	present
Second District	D. C. Houser	present	present
Third District	O. P. Klotz	present	present
Fourth District	D. J. Slosser	present	present
Fifth District	C. L. Cummer	present	present
Sixth District	D. W. Stevenson	present	present
Seventh District	E. B. Shanley	present	present
Eighth District	E. R. Brush	present	present
Ninth District	I. P. Seiler	present	present
Tenth District	S. J. Goodman	present	present
	Total	85	102

Council Meetings Held During The 84th Annual Meeting of The Ohio State Medical Association,

MINUTES

The Council of the Ohio State Medical Association convened at dinner at the Athletic Club, Columbus, Ohio, at 6:30 P. M., Monday, May 12, on the eve of the opening of the 84th Annual Meeting of the State Association.

The officers, councilors and committeemen present were: Drs. Freiberg, Waggoner, Stone, Platter, Caldwell, Houser, Klotz, Slosser, Cummer, Stevenson, Shanley, Brush, Seiler, Goodman; Dr. J. H. J. Upham, Chairman, and Dr. H. S. Davidson, a member of the Policy Committee; Dr. J. E. Tuckerman, Chairman of the Medical Defense Committee; Dr. J. Craig Bowman, Chairman, and Dr. Geo. Edw. Follansbee, former President and member of the Medical Economics Committee; Dr. L. L. Bigelow, former President; and Dr. R. B. Drury, President of the Columbus Academy of Medicine, and Executive Secretary Martin, and Assistant Executive Secretary Nelson.

Following the dinner and upon the convening of the business session, Dr. Freiberg called attention to the fact that this Annual Meeting marks the Tenth Anniversary of a decade of continuous service on the Council by Dr. Goodman and expressed appreciation on behalf of the Council for his effective service.

President Freiberg read a communication from the Shelby County Medical Society relating to an honor extended to that community through the presentation of a first prize bronze plaque, awarded to the city of Sidney by the United States Chamber of Commerce for having attained first place in a health conservation program in the class of cities under twenty thousand population. The Council expressed congratulations.

The minutes of the last regular Council meeting on Sunday, March 2, 1930, (published on pages 337 to 340, inclusive, of the April, 1930, issue of *The Journal*), were approved, upon motion seconded and carried.

Dr. Goodman, Chairman of the Council Committee on Arrangements, and General Chairman of the local committees on arrangements for the Annual Meeting, called attention to the final plans since the last announcements were made and introduced Dr. Drury, President of the Columbus Academy of Medicine, who supplemented the announcements made by Dr. Goodman. Council expressed appreciation to Dr. Goodman and to Dr. Drury and the local committees for their preliminary plans and activities.

VACCINATION SITUATION IN TIFFIN

There was submitted for the consideration of Council a report signed by the Policy Committee bearing upon problems of smallpox control and vaccination in Tiffin, and involving the local board

of health, the local board of education, the local profession, and the State Department of Health.

Reference was made to a joint conference held during the afternoon of this day, attended by the Policy Committee, the Council, and representatives of the Tiffin Board of Health, including Mayor John Dreitzler, of Tiffin, Mr. C. S. Garrett, a member of the Tiffin Board of Health; Dr. H. L. Wenner, a former member of the Board of Health; Dr. J. A. Gosling, health commissioner of Tiffin; and Dr. Charles A. Neal, State Director of Health, and Dr. Finley Van Orsdall, chief of the division of Communicable Diseases of the State Department of Health.

The Council, in discussing matters brought up at the conference on this afternoon, considered a typewritten document and statement presented to the Council and signed individually by six members of the Tiffin Board of Health, including Mayor Dreitzler, Mr. C. S. Garrett, Mr. P. M. Mueller, Mr. Charles G. Dore, Mr. Charles S. Baron, and Dr. R. F. Machamer. A statement was also considered which had been filed with the State Director of Health by Dr. W. B. Lacock, of the Division of Communicable Diseases of the State Department of Health.

Following detailed discussion by members of Council, on motion by Dr. Waggoner, seconded by Dr. Seiler and carried, the following resolution embodying a report on this question from the Policy Committee was adopted and authorized for transmission to the House of Delegates at its meeting on the following morning for consideration and action.

WHEREAS, The Council of the Ohio State Medical Association considers it of utmost importance that due emphasis always be placed upon the measures which modern preventive medicine has shown to be of unquestioned value and especially such as vaccination against smallpox, and

WHEREAS, It becomes more difficult to secure the adoption of such preventive measures unless local health boards may speak with authority and may rely upon the support of the State Department of Health and all other health agencies, both official and unofficial, when they have the cooperation of the local medical profession,

THEREFORE, BE IT RESOLVED, That the Council of the Ohio State Medical Association approve the recommendation of the Committee on Public Policy concerning the situation in Tiffin as incorporated in the appended report of the Policy Committee as follows:

The Policy Committee reports to the Council of the Ohio State Medical Association that a hearing was held May 12, 1930, regarding the complaint of the Board of Health of Tiffin involving the attitude of the State Department of Health towards the efforts to check the threatened epidemic of smallpox by bringing about vaccination among the school children of the city. Dr. Neal, state director of health, was heard and supported the action of the representative of his department. It is the opinion of the Policy Committee that the Tiffin Board of Health took the proper measures under the circumstances and this committee deplores the action on the part of the State Department of Health which appears to have had the effect of weakening the influence of the local Board of Health in that community.

Signed: J. H. J. Upham, Chairman; John B. Alcorn, A. H. Freiberg, C. W. Waggoner and H. S. Davidson, members of the Policy Committee, May 12, 1930.

Signed: Council of the Ohio State Medical Association, by

S. J. GOODMAN, M. D.,
Secretary of Council.

QUESTIONS OF PROFESSIONAL RELATIONS

For the information of the Council, Dr. Klotz, and Dr. Follansbee, Chairman of the Judicial Council of the American Medical Association, reported on an all-day session held in Lima, Ohio, on Friday, May 9, for an investigation of conditions involved in the case of Dr. Charles H. Leech.

Dr. Klotz also reported, through correspondence and otherwise, on the developments in the case of Dr. D. F. Russell, of Van Wert, since the special Council meeting on this matter held on March 16, 1930.

LABORATORY PROBLEMS

Dr. Goodman read correspondence from several physicians in laboratory practice and members of the Ohio Society of Clinical and Laboratory Diagnosis, requesting consideration and action by the Council on the extension of service rendered by the State Department of Health Laboratory.

Upon motion by Dr. Goodman, seconded by Dr. Seiler and carried, this correspondence and this question were referred to the Medical Economics Committee for action and possible conferences with representatives of the Ohio Society of Clinical and Laboratory Diagnosis.

WORKMEN'S COMPENSATION PROBLEMS

Dr. Stone reported in detail on a number of complicated problems in connection with various groups, committees and conferences which are proposing various types of amendments to the Ohio Workmen's Compensation Law at the next session of the Legislature. This information and subsequent discussions were referred to the Medical Economics and the Policy Committees.

Dr. Davidson, a member of the Policy Committee, discussed questions in relation to the "free choice" of physicians by injured employes under the Workmen's Compensation Law, and submitted the draft of a resolution which he stated he might introduce into the House of Delegates the following morning. After further discussion, on motion by Dr. Goodman, seconded by Dr. Cummer and carried, this resolution, prepared by Dr. Davidson, was referred to the Medical Economics committee.

A MEDICAL-LEGAL QUESTION

Detailed correspondence from Dr. F. V. Gammage, Akron, relative to legal problems in the securing of cadaver material for dissection and scientific purposes was submitted for the information of the Council.

MENTAL HYGIENE PROBLEM

There were submitted to the Council, communications from members of the special State Association committee on Mental Hygiene, requesting the Council and the Association to "officially recognize and approve the newly organized Ohio Mental Hygiene Association." Additional correspondence, prospectus and regulations of the Ohio Mental Hygiene Association were considered. Members of Council called attention to the previous history of a state association organized for similar purposes and pointed out the differences in personnel and setup from that organization.

Upon motion by Dr. Caldwell, seconded by Dr. Seiler and carried, the Council referred the communications from the members of the Mental Hygiene Committee and from the secretary of the Ohio Mental Hygiene Association to the Policy Committee.

PERIODIC HEALTH EXAMINATIONS

The Council considered in detail the minutes of the State Association's special committee on Periodic Health Examinations, held in Columbus on March 23, 1930, in which that committee made a number of recommendations and requests to the Council, including a request for an appropriation for the printing of cards for distribution by physicians to their patients, advocating periodic health examinations, to be signed by the State Association, or the Periodic Health Examinations Committee and possibly signed jointly by other outside organizations interested in the movement for periodic health examinations.

This question was discussed at length and while there was general approval evidenced toward the value of periodic health examinations of apparently well people, as a forward step in preventive medicine and the discovery of early signs and symptoms and the control or correction of physical disabilities, the Council, on motion by Dr. Brush, seconded by Dr. Seiler and carried, rejected the requests and recommendations of the Periodic Health Examinations Committee.

BELMONT COUNTY SITUATION

There was submitted to the Council for consideration a formal statement and resolution signed by twenty-four Belmont County physicians pertaining to the medical service system of the Wheeling and Lake Erie Coal Mining Company, in connection with its miners and their families in that district.

After discussion and review of the history of this problem, the Council recommended to the Medical Economics Committee that it arrange, if possible, for a conference with Belmont County physicians during the present Annual Meeting of the State Association in Columbus and give further consideration to this problem.

MISCELLANEOUS

A communication was read from the Ohio Chamber of Commerce, inviting the opinion of the Ohio State Medical Association as to whether or not a question should be submitted to the general election in 1932 in relation to a constitutional convention. Members of Council expressed themselves as appreciating the invitation from the Ohio Chamber of Commerce, but their belief that the Ohio State Medical Association, made up of scattered members with varying opinions on this question, could not express an official opinion at this time.

Another communication from the Ohio Chamber of Commerce was submitted relative to a conference to be held in Columbus, May 22, 1930, for the purpose of considering a constitutional amendment and legislation permitting changes in the setup of county government.

Upon motion by Dr. Caldwell, seconded by Dr. Stevenson and carried, the Executive Secretary was authorized to attend or send a representative to that conference for the purpose of indicating interest, to secure information and report back to the Council with more complete information.

A communication was read from Frank E. Chapman, Superintendent of Mt. Sinai Hospital, Cleveland, soliciting the interest of the Council in a movement to restrict and safeguard the use of bichloride of mercury. Upon motion by Dr. Shanley, seconded by Dr. Slosser and carried, the matter was referred to the Policy Committee.

A report was submitted in response to action taken at the last meeting in an effort to secure the names of Ohio physicians who plan to attend international medical and health conferences abroad this summer. Attention was called to the publication of a news item on this matter on page 336 of the April issue of *The Journal*, but thus far no members have officially indicated to the State headquarters their intention to attend.

Membership data submitted by counties showed that the present membership to this date is 5263 for 1930, as compared with 5298 on the same date last year, and as compared with a total of 5528 at the end of 1929.

Dr. Freiberg read a letter which he had received from Mrs. Margaret Sanger, of New York, relative to the possible attitude of medical organization toward the question of birth control. Several members of Council pointed out the controversial angles of this question and the different opinions among the members. Upon motion by Dr. Brush, seconded by Dr. Stevenson and carried, the Council requested Dr. Freiberg to reply to the communication.

Dr. Goodman moved a standing vote of thanks to Dr. Freiberg for his leadership, fairness and courtesy as the presiding officer of the Council during his term as President which now expires. This motion was carried by a rising vote with applause. Dr. Freiberg graciously responded and declared that whatever service he had been able to render was made possible through his con-

tact with, information from, and support of the Council, individually and collectively.

Upon motion, the Council adjourned to meet with the House of Delegates on the following morning, Tuesday, May 13, in the Ball Room, Neil House, Columbus.

WITH THE HOUSE OF DELEGATES

The Council of the Ohio State Medical Association met officially with and as a part of the House of Delegates in the Main Ball Room, Mezzanine Floor, of the Neil House, on Tuesday, May 13, at 9:30 A. M. and also at the second and last session of the House of Delegates in the Junior Ball Room, Mezzanine Floor, Neil House, on Wednesday afternoon, May 14, at 1:30 P. M., and participated officially in both sessions. Minutes of the Council meetings with the House of Delecates are included as a part of the proceedings of the latter in this issue of *The Journal.*

FINAL MEETING

Council of the Ohio State Medical Association held its final meeting during the 84th Annual Meeting of the State Association in the Junior Ball Room, Neil House, at 4:30 P. M., Wednesday, May 14, immediately following the adjournment of the 1930 session of the House of Delegates with the following members present: The newly installed President, Dr. Waggoner, and Councilors Caldwell, Huston (newly elected Councilor) Klotz, Slosser, Cummer, Stevenson, Shanley, Brush, Seiler and Goodman.

Upon motion by Dr. Slosser, carried unanimously by acclamation, Dr. Goodman was re-elected as the Secretary of the Council for the eleventh consecutive year.

On motion by Dr. Brush, the Council adjourned to meet at 1:00 P. M., on Sunday, July 6, 1930.

S. J. GOODMAN, M.D.,
Secretary of Council.

Successful and Well-Attended Annual Meeting in Columbus Celebrates 84th Birthday of The Ohio State Medical Association

Organized medicine in Ohio celebrated its 84th birthday, May 13, 14 and 15, at the Neil House, Columbus, the annual meeting of the Ohio State Medical Association concluding in an auspicious manner a year crowded with activity, achievements and accomplishments.

Not only did the 1930 annual gathering of Ohio's medical profession serve as a medium for taking inventory of past activities of the State Association in behalf of the public, as well as its membership at large, but it also offered the opportunity for serious and thorough discussion of numerous questions and problems relative to public health, medical practice and scientific medicine.

The 84th annual meeting with its splendid attendance indicated the active interest being taken throughout the state among members of the medical profession in the economic and social phases of medicine as well as the desire of physicians to attend gatherings where new ideas and angles pertaining to scientific medicine and public health work can be considered.

From every angle this year's annual meeting will go down in history as one of the best ever held by the State Association, due to the efficient and conscientious work of those who had been assigned the task of arranging and handling the innumerable details in connection with the meeting; the splendid judgment used by the program drafters in the selection of essayists and discussants, the serious thought and labor devoted by these participants to their presentations; and the attentiveness, enthusiasm and cooperation displayed by the hundreds of physicians who were privileged to attend the meeting.

* * *

Nearly 100 Ohio physicians and eight speakers from other states took part in the program, either as essayists, discussants or lecturers.

All sessions of the scientific sections—medicine; surgery; eye, ear, nose and throat; obstetrics and pediatrics; nervous and mental diseases, and public health and industrial medicine—were largely attended, testifying to the quality of the papers presented and the discussions held. Sessions of the scientific sections were held on Tuesday afternoon, May 13, and Wednesday morning, May 14. The general session under the joint auspices of the medical and surgical sections was held on Thursday morning, May 15, and was unusually well attended despite the fact that it concluded the three-days program. Many also took the opportunity to witness the showing of three interesting and instructive motion pictures Wednesday afternoon, May 14, on "Rabies;" "Simple Goiter;" and "Benign Prostatic Hypertrophy."

Those from other states who took part in the program were: Dr. John Osborn Polak, Brooklyn, N. Y. and Dr. L. G. Rowntree, Rochester, Minn., who addressed the Wednesday afternoon general session on "Fads and Fancies of Obstetrics and Gynecology, and Their Cost," and "The Results of Sympathetic Ganglionectomy and Ramisectomy in the Treatment of Chronic Arthritis," respectively. Dr. Willard C. Rappleye, New Haven, Conn., director of study for the Commis-

sion on Medical Education, who spoke at the Wednesday evening general session on "Medical Problems and Education;" Dr. Cyrus C. Sturgis, Ann Arbor, Mich., and Dr. Charles L. Scudder, Boston, who addressed the joint meeting of the medical and surgical sections, Thursday morning, on "An Appraisal of the Therapeutic Measures Used in the Treatment of the Anemias" and "The Reasons for the Treatment Advocated in Certain Fractures," respectively; Dr. Hugh Cabot, Ann Arbor, Mich., who spoke to the surgical section on "Choice of Anesthetics with Particular Relation to the Protection of the Patient;" Dr. George M. Coates, Philadelphia, who addressed the eye, ear, nose and throat section on "Chronic Suppurating Ears;" and Dr. John Sundwall, Ann Arbor, Mich., who spoke to the public health and industrial medicine section on "The New Public Health and the Physician."

* * *

Both sessions of the House of Delegates, Tuesday morning and Wednesday afternoon, were well attended and an unprecedented amount of important business transacted in an efficient and prompt manner. At the initial assembly of the delegates, Dr. Robert B. Drury, president of the Columbus Academy of Medicine, officially welcomed the visiting physicians, after which Dr. A. H. Freiberg, the president, took the chair and called the House of Delegates to order. The outstanding business of the first session was the appointment of various committees to handle the business of the House of Delegates; the introduction of resolutions; the presentation of the annual reports of the standing and special committees and the officers; election of a nominating committee and action on the proposed amendments to the Constitution and By-Laws of the State Association. The speedy and efficient way in which the House of Delegates acted upon the proposed amendments to the Constitution and By-Laws was evidence of the fact that practically every delegate had devoted considerable time and much serious thought to the proposals in advance of the annual meeting.

At the second and final session of the House of Delegates, Dr. C. W. Waggoner, Toledo, was installed as president and Dr. D. C. Houser, Urbana, councilor from the second district, was elected president-elect for 1930-31.

Five members of the Council whose terms expired this year were re-elected, namely: Dr. John A. Caldwell, Cincinnati, first district; Dr. O. P. Klotz, Findlay, third district; Dr. C. L. Cummer, Cleveland, fifth district; Dr. E. B. Shanley, New Philadelphia, seventh district, and Dr. I. P. Seiler, Piketon, ninth district.

Dr. E. M. Huston, Dayton, was elected councilor of the second district, filling the vacancy created by the election of Dr. Houser to the office of president-elect.

The present delegates and alternates to the American Medical Association annual meeting whose terms expired this year were re-elected for two-year terms, as follows: Dr. Wells Teachnor, Sr., Columbus, delegate, Dr. D. H. Morgan, Akron, alternate; Dr. Ben R. McClellan, Xenia, delegate, Dr. A. C. Messenger, Xenia, alternate; Dr. E. R. Brush, Zanesville, delegate, Dr. H. S. Noble, St. Marys, alternate; Dr. Geo. Edw. Follansbee, Cleveland, delegate; Dr. C. L. Cummer, Cleveland, alternate.

The invitation of the Summit County Medical Society to hold the 1931 annual meeting in Akron was accepted by the House of Delegates.

The official proceedings of the House of Delegates will be found elsewhere in this issue of *The Journal.*

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One of the outstanding events of the Columbus meeting was the annual banquet held in the main ball room of the Neil House on Tuesday evening, May 13. About 500 physicians and their ladies attended this colorful social function which took the place of the usual general session held on the evening of the first day's session of the annual meeting.

Following the banquet the president, Dr. Freiberg, and president-elect, Dr. Waggoner, presented their annual addresses, the complete texts of of which are published elsewhere in this issue of *The Journal.*

A president's gavel was presented to Dr. Freiberg by Dr. J. H. J. Upham on behalf of the State Association as an expression of the esteem held by the members of the State Association for Dr. Freiberg and a token of appreciation for the faithful and able services he had rendered during his tenure of office.

An instrumental and vocal musical program, a brief demonstration in magic and sleight-of-hand by a professional troupe and an informal reception for the president and president-elect concluded the banquet program.

The success of the dinner gathering, revived after a number of years, should be credited to the efficient committee on entertainment of the Columbus Academy of Medicine which labored long and untiringly to make this affair successful. The committee consisted of Dr. Joseph Price, chairman, who presided at the dinner as toastmaster; Dr. Roy E. Krigbaum, Dr. C. W. McGavran, Dr. John W. Means and Dr. L. M. Murphy. The committee functioned under the general chairmanship of Dr. S. J. Goodman.

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Another high-spot of the Columbus meeting was the Wednesday evening general session which was addressed by Dr. L. L. Bigelow, Columbus, former president of the Ohio State Medical Association, and Dr. Willard C. Rappleye, New Haven, Conn., director of study for the Commission on Medical Education.

The grand ballroom of the Neil House was filled

almost to its capacity for these two brilliant and illuminating discussions of many of the social, economic and educational problems and questions confronting public health, scientific medicine and medical practice.

The hundreds of physicians and their guests who had assembled to hear these important questions discussed were abundantly rewarded for their time and interest, it being the concensus of large numbers of the audience that seldom, if ever, has the membership of the State Association had the opportunity to listen to two better-prepared and better-informed students of these vital problems on the same occasion.

Medicine stands at a serious crisis in its history, said Dr. Bigelow at the outset of his address on "Medicine, Profession or Business," and he voiced the prediction that it is not unlikely that before long the medical profession may have to come to a decision that will be vital and far-reaching in effect, not only to physicians as individuals and as a profession, but on the nation whose health welfare is so largely in the profession's keeping.

"Are we in favor of an extension of the practice of medicine by the state to the point where in its comprehensive form there will be no more private practice, and the doctor will become a salaried official, taking his orders from a government to whom he will be directly responsible for every phase of his assigned professional work or are we opposed to the socialization of medicine?" Dr. Bigelow asked in laying the foundation for his discussion, adding: "Our future weal or woe and that of the people we serve will be determined by our answers to these questions."

Dr. Bigelow analyzed carefully the complex and heterogeneous organs and tissues of the body politic, each of which is conscious of its importance to itself and each certain that the product of its activity is vital to the general welfare, and summarized the struggling and striving for positions of advantage and material rewards.

"When illness befalls, however," he declared, "and death lurks around the corner, there comes a quick appreciation, shared by every member of the race, that what is yearned for most, is that which alone gives value to all seeming value—namely life itself and the health that makes life worth while.

"The medical profession, therefore, dedicated to the alleviation of suffering and the prolongation of life may thus be seen to be ministering to an elemental human need; and because of the fundamental and vital responsibility that rests upon it, it should be regarded by common consent as the most important and indispensable group of the human family. Proposals striking at the very root of this profession, that will inevitably cause profound nutritional disturbances in it, and modify or change completely its intellectual, moral and spiritual outlook, are too far-reaching to be adopted lightly. The unlovely facts that may be gathered here and there by inspired fact-finding committees about the doctor, who contacts at some time in a necessary and vital way with every member of the human family, require to be interpreted in their proper relationship to the whole subject. They should not be used as the basis of propaganda to create by an appeal to the prejudices and emotions of the public a misled majority that, through unwise legislation, may work irreparable harm.

"The social reformers concerned with the problems of this complex medium of human relationships, and engaged at the present time in the effort to socialize medicine, should adopt a pragmatic definition of truth, and be content with something that works, not something that can seem to be made to work under a despotic government by a suppression of liberty, but something, that, with all its imperfections, deficiencies and lost motions—inseparable accompaniments of all human endeavor—makes still its notable contribution to the general good, and has native in itself the power of adaptation, repair and growth."

For the purpose of illustration, Dr. Bigelow likened some of the surveys and studies being made of medicine to a hypothetical survey of a city in which the critics try to present a true and accurate picture of that city by only concentrating on its alleys, dirty and littered slums, its several poorly paved streets, possible dishonesty and inefficiency of some of its officials, etc., to the utter disregard of its well-paved streets, beautiful parks, fine public buildings, churches, schools and universities and its honest and efficient public officials.

"As a result of such an investigation are the people to conclude that the only thing to do to save the situation is to declare martial law, to set up an absolute authority and to demand unlimited obedience to it?" Dr. Bigelow asked.

Just such investigations of medicine are now under way, he said, and just such instances of ignorance, error and incompetency among the members of the medical profession are being sought out and paraded before the public mind as evidence that medicine, as it is now organized and practiced, is shot through with weakness and decay; that it no longer deserves public confidence and support; that the only solution for it and for the people whose health-welfare it serves, is to destroy that independence and freedom which it has abused, to establish martial law, and make its members the paid agents of the state.

"Is it not the part of wisdom for the social reformers who are urging this drastic reformation, and for the public mind which is being diverted by these spear thrusts into the side of medicine, to be sure before the revolutionary step is taken and medicine is completely socialized, that the abuses now complained of will fade away, and that the imposing array of things undone, and the morbidity and mortality, which are now held

up as a reproach to medicine will dwindle and disappear?" Dr. Bigelow declared.

"May we not here paraphrase the words of Lincoln, used on an occasion when the fate of the union trembled in the balance, and ask of those who really love medicine and justly value its contribution to humanity, if, before entering upon so grave a matter as the destruction of a free profession, with all its benefits, its memories and hopes, it would not be wise to ascertain why we do it? Will we hazard so desperate a step while there is any possibility that any portion of the ills we should fly from have no real existence? Will we, while the certain ills we shall fly to, are greater than the real ones we fly from, dare to make so fearful a mistake?"

Dr. Bigelow refuted that fallacious conception held by some that experience has shown that under a system of state or socialized system, medicine has made or is making better contribution to the general welfare; renewing itself with a finer type of personnel; making more rapid progress in research and discovery; giving the individual physician a happier, more contented existence and a more stable economic and social life.

If these fond hopes have been realized, he said, then the appeal for state medicine might well be made, not to the emotions but to the intellect of the public mind and every thoughtful, patriotic citizen, doctor included, would be duty bound to hasten the day of its adoption. But such hopes have not been realized, he added, there being abundant evidence to the reverse of those contentions.

In conclusion, he pointed out the flaws in the impractical schemes advanced by certain leaders of "big business" who contend that medicine should follow the methods which have led to apparent success in that field of endeavor, and he challenged the medical profession to be prepared "with close drawn ranks to dare whatever must be dared to maintain our rightful and effective place."

* * *

One of the largest problems before the medical profession at the moment is the closing of the gap which will make the application of the profession's present knowledge both available and effective, in the opinion of Dr. Rappleye, who voiced a word of warning regarding some of the suggestions that have been put forward recently in an endeavor to solve the problem of adequate distribution of medical services to the entire population at a reasonable cost, pointing out that some of the proposed remedies aim to provide a quick, but only a temporary, solution.

"It is quite apparent," he said, "that some of these plans are governed more by emotion than judgment and too frequently they are proposed by individuals unfamiliar with the fundamental nature of the problem. Any scheme dealing with public problems must be judged ultimately by the effects it has upon the individuals whom it is designed to help.

"If that is true, a plan of medical service must be judged from its effects upon those in need of medical advice and treatment, and the quality of the services rendered. Because of the technical character of medical service, it is reasonable to insist that it shall be provided by those who have had a training which qualified them to perform it. The essential feature of a competent and effective medical service is trained and informed personnel. Any plan, whether developed from within the profession or imposed upon it from without, that lessens the responsibility of the trained physician in the care and treatment of patients or denies him the rewards of individual effort and superior ability, will, in the long run, be detrimental to the public welfare.

"Whether the scheme to be worked out will be sound or fallacious depends to a considerable extent upon the type of leadership in the program. If we are right in assuming that every individual in the community should receive the benefits of modern medical knowledge and that considerable numbers still do not receive such benefits, it is more than likely that efforts by amateurs, social uplifters, politicians and others will be made to correct that difficulty. But no matter how sincere these efforts are or how bad some of the defects in medical care may be, there are certain fundamental considerations which will determine the ultimate success of any plan.

"There are several phases of the problem. One is economic and is concerned with the financial aspects of medical care and the provision and distribution of facilities required for an adequate service to a community. Another is that of professional organization which will provide a proper distribution of professional services to meet effectively the actual needs of the community. No plan of medical care can be fully successful without intelligent public opinion and cooperation based on confidence in those conducting the program. Still another feature is educational in character and deals with the recruitment and training of physicians, nurses, technicians and other personnel essential to a health service and the educational program necessary to keep that personnel abreast of new knowledge and methods."

Dr. Rappleye discussed extensively the economic aspects of the problem, pointing out that statistics, showing direct expenditures in the United States for medical care represent a little over 2 per cent. of the national income, indicate that the cost of medical care is not unreasonably high and that while total expenditures for medical care are obviously great, they are insignificant when compared with other items of our national expenditures and with the capitalized value which they aim to protect.

"In fact," declared Dr. Rappleye, "there is every reason to believe that the present expenditures for medical care may be insufficient to guar-

antee an adequate service. Certainly they are reasonable."

Dr. Rappleye indicated that he was not at all in sympathy with various proposed plans for national health insurance and with the systems now being used in several European countries.

"There are many who believe," he said, "that it is possible to avoid the serious defects of national insurance by the development of other schemes which will retain the advantages and strong features of individual and voluntary effort as contrasted with the regimentation and standardization of patients and doctors, the level of mediocrity and loss of personal responsibility and initiative which such procedures aim to secure and the political and financial implications that are so likely to follow any universal governmental plan.

"All of us are aware of defects in the methods of medical practice in this country, but there are fundamental advantages in the American scheme which need to be capitalized and made more widely available, which a governmentally regulated medical service is likely to destroy. The problem we have is not the destruction of our present system and the substitution of a paternalistic scheme ill-adapted to the philosophy of American life but rather the extension of the desirable features of our present scheme and the correction of its defects."

In conclusion Dr. Rappleye declared that there are certain general principles in solving the problem of medical service that should be followed, namely:

(1) Practice of preventive medicine as an integral part of general practice.

(2) Emphasis on basic medical service and elimination of self-selection of specialists by patients.

(3) Responsibility of the medical profession to guarantee to the public that those who claim to be specialists are, in fact, experts in their field.

(4) Provision for ways and means of continuing the education of physicians in practice.

(5) Revision of medical education to have it emphasize the learning of methods; the establishment of sound habits of study and the instruction of the student regarding the care, treatment and conservation of the mental, emotional and physical health of the patient as a whole, not alone to the diagnosis and treatment of the physical ailment of one part of his physical machine.

(6) Better organization and correlation of existing facilities for practice to overcome the undesirable features of competition, duplication of effort, confusion and waste.

* * *

Between 150 and 200 attended the organization luncheon held Wednesday noon for the officers and various committeemen of the component county medical societies and the officers of the State Association.

In a short talk following the luncheon, Dr. Freiberg, the retiring president of the State Association, congratulated the officers and committeemen of the various county societies on their active and keen interest in the affairs and functions of organized medicine and their faithful service and splendid cooperation with the officers, committees and headquarters office of the State Association. On behalf of the officers of the State Association he thanked the county society representatives for their hard, earnest and conscientious work during the past year, pointing out that nothing could have been accomplished had it not been for their interest and the interest of the membership at large in the program and activities of the State Association. Dr. Freiberg explained the organization machinery of the State Association and the activities of the various standing and special committees.

Dr. Waggoner, the new president, was introduced by Dr. Freiberg. Dr. Waggoner outlined briefly some of the problems and questions facing organized medicine in Ohio. He urged every officer, every committeeman, and in fact every member of every county medical society in the state to be on his toes and be prepared to meet any challenges which may arise during the next twelve months. The numerous important questions which confront the medical profession and organized medicine can be successfully solved if the same spirit of cooperation, service and interest on the part of all members, and especially the officers and committeemen, prevails during the ensuing year, Dr. Waggoner declared.

He pointed out that during the next twelve months there will be a session of the Ohio Legislature when matters of vital importance to public health, scientific medicine and medical practice will be the subject of discussion by members of the General Assembly. Dr. Waggoner emphasized the great need for members of the county medical societies, and especially the legislative committeemen, to continue their contacts with members of the legislature, pointing out that the great bulk of the work of keeping the legislators informed in the correct medical-health viewpoint on proposed legislation falls on the shoulders of the physicians "back home."

Dr. Waggoner, in conclusion, declared that physicians should at all times form contacts with social and civic groups and demonstrate in every way possible that the medical profession is in fact, as it is in theory, unselfish and altruistic; imbued with the spirit of service to the community and possessed of a sympathetic understanding of the social, economic and health problems of the people. He urged every county society to be ready to offer sincere, diplomatic and constructive criticism and suggestions on all matters affecting the health and welfare of the public; to be prepared to defend

scientific medicine and the medical profession against the activities of destructive individuals and groups, and build its house upon a rock by selecting safe and constructive leaders.

A more detailed discussion of the approaching legislative session in Ohio was made by Dr. J. H. J. Upham, Columbus, Chairman of the Committee on Public Policy, and who has been the generalissimo of organized medicine's forces in legislative battles for the past two decades.

Dr. Upham predicted that the coming session of the Legislature would be one of the most important and busiest in the history of the state. He sounded the warning that organized medicine must be prepared to act effectively and unitedly for its ideals and standards, as well as defend the public against the passage of legislation which the medical profession knows would be injurious and detrimental to the health and welfare of the people. Dr. Upham suggested that physicians begin at once forming contacts with candidates and prospective candidates. In conclusion, he urged officers and committeemen of the county societies to keep in close touch with the Policy Committee through the State Association headquarters office and devote thorough study to the bulletins issued at intervals by the Policy Committee through the headquarters office.

High spots of the annual report of the Committee on Medical Defense were reviewed by Dr. J. E. Tuckerman, Cleveland, chairman of that committee. Dr. Tuckerman emphasized the slogan of that committee, "Talk is not cheap, but silence is golden," in admonishing all physicians to beware of careless and thoughtless remarks about colleagues which, he believes, constitutes the chief cause of the increasing number of unwarranted suits and threats of suits for alleged malpractice.

Dr. Tuckerman advised against compromises with persons filing unwarranted suits for alleged malpractice. No physician who knows he is innocent of malpractice should become involved in a compromise settlement, he said, adding that such compromises give the blackmailer and malpractice racketeer an excuse to continue their hold-up schemes in the hope of dragging other innocent victims into their net. Compromises also serve as a suggestion to other suits by disgruntled or greedy patients, Dr. Tuckerman said, reiterating his previous statement that a physician defendant in an unwarranted malpractice suit should stand pat and depend on the courts for complete vindication if necessary and not jeopardize his reputation by compromising, which in effect, he believes, is an admission of guilt. He also emphasized the necessity of promptly notifying the committee of the filing of suits.

* * *

A large share of credit for the outstanding success of the Columbus gathering belongs to the Columbus committees charged with the task of arranging and carrying out the innumerable details in connection with the meeting.

Operating under the able general chairmanship of Dr. S. J. Goodman and his assistant chairman, Dr. Drew Davies, the local committees functioned most efficiently and won the commendation and congratulations of the visiting physicians. The schedule of meetings was adhered to with precision due to the fact that the set-up for the meeting places had been charted in advance and arranged so that there would be no last-minute slip-up.

Even the bugaboo of every annual meeting—the stereopticon machine—received a sound drubbing because of the well-laid plans of the local committee in charge of that important detail. Although one instance of a failure of one of the six machines to work for a time was recorded.

All details of the meeting were handled in an efficient manner which kept the gathering moving along on schedule and in a manner satisfactory to program participants, as well as listeners.

The personnel of the local committees was as follows:

Reception—Drs. Robert B. Drury, chairman; John B. Alcorn, J. F. Baldwin, James A. Beer, L. L. Bigelow, Andre Crotti, E. J. Emerick, E. A. Hamilton, George T. Harding, Louis T. Hess, F. L. Keiser, C. A. Neal, W. H. Pritchard, C. O. Probst, R. A. Ramsey, Wells Teachnor, Sr., and J. H. J. Upham.

Entertainment—Drs. Joseph Price, chairman; Roy E. Krigbaum, C. W. McGavran, John W. Means and L. M. Murphy.

Stereopticon—Drs. Hugh A. Baldwin, chairman, and Jonathan Forman.

Halls and Meeting Places—Drs. J. Quinn Dorgan, chairman; Orville L. Baldwin, E. H. Baxter, E. C. Beam, C. I. Britt, W. C. Davis, N. C. Dysart, Samuel D. Edelman, Clarence Fry, Morris Goldberg, Fred Hall, G. T. Harding, III, E. W. Harris, Herman W. Koerper, R. J. McGuinness, John Rauschkolb, Paul D. Scofield, H. H. Snively, Henry H. Schwarzell, F. W. Thomas, M. H. Turton, C. M. Valentine and F. C. Wagenhals.

Exhibits—Drs. L. H. Van Buskirk, chairman; B. W. Abramson and C. J. Shepard.

Clinics—Drs. Fred Fletcher, chairman; G. Wayne Brehm, John Edwin Brown, Ivor G. Clark, Andre Crotti, E. J. Gordon, I. B. Harris, Joseph Price, J. M. Rector, A. M. Steinfeld, Wells Teachnor, Jr.

* * *

Probably one of the most complete, as well as interesting programs of medical and surgical clinics ever presented at an annual meeting was given Monday, May 12, on the day preceding the official opening of the Columbus gathering, and on Tuesday morning, May 13.

The demonstrations, arranged by the Committee on Clinics of the Columbus Academy of Medicine of which Dr. Fred Fletcher was chairman, were held in the following Columbus hospitals: Grant, Mercy, Mt. Carmel, St. Francis, University and White Cross. Approximately 130 clinical demonstrations, both wet and dry, were staged.

The members of Dr. Fletcher's committee to

whom great credit is due for the splendid program were: Drs. G. Wayne Brehm, John Edwin Brown, Ivor G. Clark, Andre Crotti, E. J. Gordon, I. B. Harris, Joseph Price, J. M. Rector, A. M. Steinfeld and Wells Teachnor, Jr.

Columbus physicians who participated in the clinic program were: Drs. J. F. Baldwin, Robert B. Drury, Fred Fletcher, I. B. Harris, Hugh Beatty, Charles H. Hoffhines, John Edwin Brown, J. M. Rector, Charles W. McGavran, E. F. McCampbell, Hugh A. Baldwin, J. M. Dunn, Harlan Wilson, Carl D. Postle, Joseph Price, Charles S. Hamilton, Wells Teachnor, Jr., H. O. Bratton, C. J. Burns, R. A. Kidd, L. H. VanBuskirk, W. E. Masters, G. O. Hoskins, G. T. Harding, Jr., C. W. Pavey, E. J. Gordon, E. G. Horton, J. I. Nelson, V. A. Dodd, J. W. Means, William N. Taylor, Philip Reel, Albert D. Frost, William P. Smith, Carl D. Hoy, Arthur K. Buell, G. Wayne Brehm, W. F. Millhon, M. E. Millhon, R. W. Kissane and Louis W. Mark.

* * *

Due to the extensiveness of the official program of the annual meeting, little opportunity was afforded for class, fraternity and alumni reunions and dinners. However, several informal get-to-gethers were held, among them being the annual dinner and reunion of the Class of '97 of the Starling Medical College. This dinner was held Wednesday evening, May 14, at the Deshler-Wallick Hotel. Dr. D. C. Houser, Urbana, president of the class, presided as toastmaster. The principal address was made by Professor Curtis C. Howard, former professor of chemistry at the old Starling Medical College. Professor Howard was made an honorary member of the class during the reunion. Short talks were made by several members of the class. Dr. Houser was reelected president and Dr. P. W. Willey, Columbus, was chosen secretary. The next meeting will be held in Akron at the time of the 1931 meeting of the State Association.

Among those present were: Dr. Frank E. Ayers, Celina; Dr. W. P. Bope, Decatur, Mich.; Dr. C. S. Burnside, Marion; Dr. J. E. Campbell, Columbus; Dr. J. R. Caywood, Piqua; Dr. D. V. Courtwright, Circleville; Dr. T. C. Crawford, Portsmouth; Dr. E. S. Holmes and daughter, Plain City; Dr. and Mrs. D. C. Houser, Urbana; Dr. O. M. Kramer, Millersport; Dr. J. F. Lee, Mt. Vernon; Dr. W. H. Martin, Detroit, Mich.; Dr. B. D. Osborn, Waldo; Dr. D. O. Sheppard, Barnesville; Dr. C. S. Slagle, Centerville; Dr. and Mrs. C. I. Stephen, Ansonia; Dr. and Mrs. C. T. Swaney, Niles; Dr. J. O. Wickerham, Rockford; Dr. and Mrs. P. W. Willey, Columbus, and Dr. F. C. Wright, Grove City.

* * *

The management of the Neil House responded 100 per cent. in the matter of housing the annual meeting. Everything possible to make the physician guests comfortable was done by the hotel staff which deserves mention of appreciation for the kindly, courteous and efficient way in which it treated members of the State Association and praise for its dispatch in carrying out the numerous physical details in connection with the twenty separate official meetings and functions during the three days convention. Many visiting physicians were enthusiastic about the lay-out provided by the hotel for the various section and general meetings, many terming it one of the finest arrangements ever provided for the annual meeting. The only criticisms were concerning the street traffic and High street noise which interfered somewhat with the speakers in one or two of the sections.

* * *

A prominent place on the Mezzanine Floor near the Registration Headquarters was reserved for exhibition of a bronze plaque awarded the City of Sidney by the United States Chamber of Commerce for having done the best health conservation work during the past year of any city in the nation with a population of 20,000 or less. A delegation from the Shelby County Medical Society brought the plaque to Columbus for the showing. Many visiting physicians after reading the plaque made it a point to congratulate the Shelby County doctors on the high honor bestowed upon their county and county seat city and for their excellent work in making Ohio one of four states to receive awards in the national Chamber of Commerce's coast-to-coast health conservation contest. According to one member of the Shelby County delegation the plaque is evidence of the high-class public health work that can be accomplished by close and active cooperation and interest between official health agencies and organized medicine on activities which are based on sound health and medical principles and designed for the best interests of the general public.

* * *

The general opinion among visiting physicians was that the commercial exhibits at the 84th annual meeting were of an unusually high caliber. Every available space in the exhibit hall was utilized. The arrangements of the exhibits were especially well handled due to the efficient planning and foresight of George A. Fern, veteran exposition decorator. A census of the exhibitors revealed that the registration at the various booths was greater than at any previous annual meeting.

* * *

The promptness with which the sectional meetings were started and run off was a credit to the officers of the various sections. The officers were on the job early, checking up on details and getting things in shape to start the meetings on time. All knew just what they needed in the way of equipment for the different essayists and had these details taken care of in advance so that

there was little, if any, delay in getting the assemblies under way.

* * *

Another record established by the Columbus meeting was the unprecedented registration of women physicians, from all parts of the state attending the gathering and the luncheon given Wednesday noon at the Maramor by Columbus women physicians.

* * *

One of the final acts of the House of Delegates was adoption of a motion expressing a vote of appreciation to the Columbus newspapers for the accurate and efficient manner in which the news of the three days meeting was covered and handled. Every Columbus newspaper carried extensive accounts of the various sessions daily.

THE GOLF TOURNAMENT

One hundred and thirty-seven physicians participated in the tenth annual tournament of the Ohio State Medical Golfers' Association played at the Columbus Country Club on the Monday preceding the opening of the annual meeting.

Dr. H. L. Wenner, Toledo, dethroned Dr. J. L. McEvitt, Akron, as the champion golfer among Ohio physicians and was awarded the championship cup and gold medal. Dr. Wenner set a fast pace, shooting a 77 for the first 18 holes and a 37 for the third nine, for a low gross score of 114.

Dr. Carl A. Hyer, Columbus, 1930 president of the golfers' association, finished second with a 78-41 for a low gross of 119. Dr. Louis Mark, Columbus, was third with a 77-44 for a low gross of 121.

The association trophy for low net for 27 holes was copped by Dr. L. M. Otis, Celina, with a score of 126 and a net score of 100. Second prize in this event was taken by Dr. Emerson Gillespie, Canton, with a score of 124 and a net score of 102. Third prize went to Dr. E. C. Yingling, Lima, with a score of 137 and net of 103.

Dr. F. L. Eyestone, Toledo, carried off the president's trophy awarded for the low net in the first 18 holes, his handicap being 14 and his net score 66.

Prizes for low gross on the first nine holes were won by Dr. C. R. Sikes, Cincinnati, with a 39; Dr. R. P. Bell, Cleveland, 40, and Dr. A. K. Buell, Columbus, 41.

Awards for low gross on the second nine holes went to: Dr. F. T. Gallagher, Cleveland, with a 38; Dr. J. D. Fouts, Dayton, with 40, and Dr. L. T. Carson, Cleveland, with 41.

First prize for the low gross on the third nine was taken by Dr. David Thomas, Lorain, with 40; second prize by Dr. H. M. Schuffell, Canton, with 40, and Dr. E. P. McNamee, Cleveland, 41.

Those who won prizes for low net on the first nine holes were: Dr. G. S. Hackett, Canton, 29; Dr. E. C. Brock, Columbus, 30, and Dr. R. C. Mauger, Newark, 31.

Winners in the low net for the second nine holes were: Dr. M. R. Haley, Dayton, 32; Dr. B. E. Garver, Lorain, 32; Dr. Frank Kunz, Akron, 34, and Dr. S. B. Berkley, Canton, 34.

Prizes for the best low net on the third nine were won by: Dr. R. W. Hancock, Elyria, 33; Dr. J. W. Means, Columbus, 33, and Dr. J. M. Dunn, Columbus, 33.

Dr. R. H. Birge, Cleveland, copped the "granddad's prize" with Dr. W. D. Inglis, Columbus, and Dr. C. V. Garver, Lorain, second and third, respectively.

The team championship was won by Cleveland.

Following a banquet in the evening, the following officers for the ensuing year were elected: H. H. Hatcher, Dayton, president; Dr. H. L. Wenner, Toledo, first vice-president; Dr. E. P. McNamee, Cleveland, second vice-president; Dr. E. O. Smith, Cincinnati, third vice-president; Dr. O. P. Tatman, Chillicothe, fourth vice-president; Dr. J. B. Morgan, Cleveland, re-elected secretary-treasurer.

The matter of having the eight low gross shooters play 36 holes instead of 27 holes in the championship flight at next year's tournament was discussed and left to the officers for decision.

The Columbus committee in charge of arrangements for the golf event consisted of Drs. J. J. Coons, chairman; F. C. Haney, W. D. Inglis, J. H. Warren, George C. Schaeffer and P. L. Cordray.

A. M. A. Meeting Detroit, June 23 to 27

Many Ohio physicians are planning to attend the Annual Meeting of the American Medical Association to be held June 24 to 27 in Detroit.

The location of Detroit makes it easily accessible for Ohio members especially, and it is expected that the registration from this date at the meeting will be the largest in many years.

Although Detroit is well supplied with hotels, those who are contemplating attending the A.M.A. meeting should engage room accommodations in advance if possible. Latest reports are that all of the Detroit hotels are swamped with requests for accommodations. In writing for hotel reservations, physicians should consult the data published on Page 44 of the Advertising Section of the March 1, 1930, issue of the A.M.A. *Journal.*

Ohio, as usual, will play a prominent role in the activities of the 1930 gathering, both in the scientific and business phases of the meeting.

Attendance Record at 84th Annual Meeting and Registration of Former Years Compared

Attendance at the 84th Annual Meeting of the Ohio State Medical Association, held in Columbus, May 13, 14 and 15, was in keeping with the quality of the Capital City gathering in general.

Total registration, including members, visitors, guests and exhibitors was 1775, the largest total in the history of the State Association.

The attendance and registration of members of the State Association totaled 1241, this figure being slightly under the membership registration at three previous annual meetings, but exceeding the membership attendance in all other years.

Registration of out-of-state physicians was lower than the average for the past twelve years, being 14, but the number of visitors, including medical students, interns, dentists, nurses, members of other allied professions and women guests of members, each far exceeded the figures at previous annual meetings. Guests registered totaled 435.

The number of exhibitors registered—86—was less than the number registered at the Cleveland meeting in 1929 but larger than the figure for a majority of the past 12 years.

The following tabulation for the past succeeding twelve annual meetings shows by comparison the members *registered* in attendance, the out-of-state physicians, the number of guests, exhibitors and respective totals:

Year and Meeting place	Members	Out of state Physician	Guests	Exhibitors	Total
1919 Columbus	1173	10	264	92	1529
1920 Toledo	810	17	105	80	1062
1921 Columbus	1275	28	204	96	1503
1922 Cincinnati	1066	21	184	70	1341
1923 Dayton	1117	19	202	76	1414
1924 Cleveland	1301	13	180	109	1603
1925 Columbus	1204	17	361	107	1689
1926 Toledo	903	19	120	83	1125
1927 Columbus	1320	17	286	82	1705
1928 Cincinnati	916	27	92	80	1116
1929 Cleveland	1231	15	249	124	1619
1930 Columbus	1241	13	435*	86	1775

*The usually large number of guests include 192 medical students, interns, dentists, nurses and members of other allied professions, as well as 243 women guests (by far the largest ever recorded) registered during the three-day meeting.

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OUT-OF-STATE MEDICAL GUESTS

W. C. Rappleye, New Haven, Conn.; L. G. Rowntree, Rochester, Minn.; John Osborn Polak, Brooklyn, N. Y.; Charles L. Scudder, Boston, Mass.; Cyrus C. Sturgis, Ann Arbor, Michigan; George M. Coates, Philadelphia, Pa.; Hugh Cabot, Ann Arbor, Mich.; John E. Sundwall, Ann Arbor, Mich.; Fred E. Brammer, Huntington, W. Va.; Clifford Brunk, Detroit, Mich.; James E. Fisher, New Cumberland, W. Va.; A. H. Hixson, Los Angeles, Calif.; W. H. Martin, Detroit, Mich.; Welford B. Turner, Chemical Society of Switzerland; L. L. Truax, Klamath Falls, Oregon.

The registration of the Annual Meeting by Counties follows:

Adams—S. J. Ellison, Hazel Sproull, O. T. Sproull, Ray Vaughen. *Allen*—H. L. Basinger, W. W. Beauchamp, Ezra Burnett, Edgar J. Curtiss, Earl Crafts, R. D. Doughty, George Hartnagel, E. H. Hedges, J. R. Johnson, G. E. Miller, Frank Morris, Walter A. Noble, Edward B. Pedlow, W. V. Parent, W. H. Parent, George J. Roberts, O. S. Robuck, William Roush, M. D. Soash, O. S. Steiner, T. R. Thomas, T. R. Terwilleger, J. R. Tillotson, W. H. Vorbau, A. H. Wiseley, Jr.

Ashland—George M. Emery, W. F. Emery, E. G. Grover, George W. Mehl, O. J. Powell. *Ashtabula*—C. C. Crosby, C. E. Case, R. B. Wynkoop. *Athens*—D. H. Biddle, C. C. Butt, John H. Berry, J. L. Henry, Nathan Hill, J. J. Hoodlett, C. Von Scheel, C. E. Welch, B. R. Goldsberry, Chas. S. McDougall, E. LeFever, M. N. Fowler, H. L. Pritchard, W. V. Sprague, E. T. Stanley, J. T. Merwin, L. D. Nelson.

Auglaize—E. F. Heffner, J. H. Heileman, Roy C. Hunter, Guy E. Noble, Harry S. Noble, C. P. McKee, C. E. Meckstroth, I. E. Williams. *Belmont*—E. C. Cope, F. R. Dew, W. L. Davis, H. G. Harris, C. J. Holley, John Johns, C. W. Kirkland, Chas. B. Messerly, D. M. Murphy, P. H. Pettay, D. O. Sheppard, F. P. Sutherland. *Brown*—George P. Tyler, Jr.

Butler—Hugh J. Baker, Frank M. Barden, Donald M. Blizzard, Fred W. Brosius, Harry L. Burdsall, Mildred White Gardiner, W. E. Griffith, W. H. Henry, G. D. Lummis, Mildred L. Snyder, C. A. Spitler, Claude L. Weston, Willis A. Whitman. *Champaign*—Robert W. Anderson, D. C. Houser, J. W. Norman, W. H. Sharp, L. A. Woodburn.

Clark—F. P. Anzinger, I. H. Boesel, W. E. Bright, J. E. Burgman, M. S. Collins, A. W. Detrick, C. W. Evans, F. A. Hartley, R. C. Hebble, D. W. Hogue, S. R. Hutchings, Clement P. Jones, J. A. Link, J. Roger Marquart, C. L. Minor, J. H. Poulton, Wm. B. Quinn, Jos. H. Riley, J. D. Thomas, G. C. Ullery. *Clermont*—J. M. Coleman, Thomas Longworth, Allan B. Rapp. *Clinton*—E. C. Briggs, F. E. Craig, Glenn K. Dennis, Kelley Hale, V. E. Hutchins, C. E. Kinzel, Frank A. Peelle, C. A. Tribbet.

Columbiana—R. T. Holzbach, C. R. Larkins, E. C. Louthan, Albert J. Michels, E. W. Miskall, M. D. McCutcheon, R. E. Smucker. *Coshocton*—Samuel D. Cohen, D. M. Criswell, W. H. Keenan, J. D. Lower, A. P. Magness, J. W. Shaw, J. G. Smailes, E. M. Wright. *Crawford*—Clarence Adams, K. H. Barth, E. C. Brandt, C. H. King, P. H. Murr, Chas. E. Trimble, G. T. Wasson, W. Lewis Yeomans.

Cuyahoga—A. J. Beams, Jackson Blair, M. E. Blahd, R. H. Birge, A. L. Brooks, L. J. Carson, C. D. Christie, L. W. Childs, Wm. B. Chamberlin, C. L. Cummer, Milton B. Cohen, A. G. Cranch, Richard Dexter, A. W. Dawson, Herbert L. Davis, R. C. Engel, Ida E. Fleming, Geo. Edw. Follansbee, S. O. Freedlander, C. Lee Graber, Donald M. Glover, Frederick C. Herrick, P. A. Jacobs, Henry J. John, Louis J. Karnosh, D. V. Kechele, Harold J. Knapp, C. G. LaRocco, Francis G. Leonard, William E. Lower, J. E. Linden, Myron Metzen-

baum, John B. Morgan, Robert A. Moore, Paul G. Moore, Jesse M. Moore, S. H. Monson.

John H. Nichols, H. B. Ormsby, Clayton C. Perry, H. V. Paryzek, J. L. Reycraft, A. H. Reed, Rudolph S. Reich, F. A. Rice, H. L. Rockwood, V. C. Rowland, J. M. Rogoff, Albert D. Ruedeman, C. L. Ruggles, R. G. Schnee, R. W. Scott, H. A. Schlick, Henry C. Schumacher, A. G. Schlink, E. L. Sederlin, Marvin D. Shie, Herman Campbell Stevens, Louis M. Starin, Willard C. Stoner, Charles W. Stone, G. F. Sykes, J. E. Tuckerman, Claude D. Waltz, Z. T. Wirtschafter, Ivan I. Yoder, L. W. Yule.

Darke—W. D. Bishop, W. T. Fitzgerald, F. M. Kissell, Robert T. Poling, C. I. Stephen, George F. VanPelt, O. P. Wolverton. *Defiance*—George W. DeMuth, D. J. Slosser. *Delaware*—O. W. Bonner, W. E. Borden, A. R. Callander, D. S. Cowles, G. E. Cowles, H. W. Davis, F. V. Miller, G. E. Robinson. *Erie*—R. E. Garnhart, J. T. Haynes, F. M. Houghtaling, W. D. Hoyer, Julius Kramer, Henry W. Lehrer, Henry L. Sowash.

Fairfield—H. C. Ashton, C. G. Axline, Geo. O. Beery, B. H. Biddle, P. S. Bone, A. A. Brown, Carl W. Brown, W. R. Coleman, J. T. Farley, C. H. Hamilton, G. P. Huddle, A. M. Kelley, J. M. Lantz, A. V. Lerch, R. W. Mondhank, H. R. Plum, E. B. Roller, Ralph H. Smith, W. B. Taylor. *Fayette*—S. E. Boggs, J. M. Boyd, Roy Brown, Claude C. Crum, Don C. Gaskins, James M. Harsha, W. D. Maag, E. H. McDonald, James F. Wilson, Orlyn Wiseman.

Franklin—B. W. Abramson, A. A. Ahn, D. R. Alban, N. A. Albanese, Garfield Alcorn, John B. Alcorn, K. H. Armen, J. F. Baldwin, Hugh A. Baldwin, E. H. Baxter, Henry A. Baughn, James A. Beer, J. E. Beery, Casper H. Benson, Hugh G. Beatty, E. C. Beam, H. C. A. Beach, A. M. Bleile, Morton W. Bland, H. B. Blakey, L. L. Bigelow, Donald F. Bowers, H. E. Boucher, E. E. Carleton, R. W. Bonnell, G. H. Bonnell, C. I. Britt, John Earl Briggs, Wayne Brehm, H. O. Bratton, R. A. Brown, O. G. Brown, John E. Brown, E. C. Brock, C. J. Burns, H. R. Burbacher, A. K. Buell.

J. S. Carlton, J. E. Craddock, E. F. Cox, Kenneth A. Clouse, W. H. Cleveland, C. F. Clark, I. G. Clark, Fred S. Clark, George W. Cooperrider, J. J. Coons, Paul H. Charlton, E. H. Chapin, Andre Crotti, O. L. Coddington, Irene Converse, C. H. Creed, C. W. Conley, Wm. C. Davis, M. C. Davies, Drew L. Davies, H. H. Dorr, J. Quinn Dorgan, V. A. Dodd, M. T. Dixon, N. C. Dysart, Joseph M. Dunn, A. H. Dunn, John Dudley Dunham, Robert B. Drury, W. E. Elder, S. D. Edelman, Herbert D. Emsweiler, Wm. A. Eshelman, Tom A. Evans, Earl W. Euans, Samuel R. Fairchild, J. P. Farson, Jonathan Forman, T. R. Fletcher, Fred Fletcher, Clarence Fry, Albert D. Frost, C. F. Frosh, J. M. Gettrost, F. W. Gardner, F. F. Gallen, Emilie Gorrell, F. W. Gosnell, W. J. Gorey, S. J. Goodman, H. M. Gilmore, E. J. Gordon, M. Goldberg, F. E. Ginder, H. D. Giles, F. C. Haney, J. H. Hanes, E. R. Hayhurst, S. B. Hays, R. R. Harris, F. E. Hall, Augustus A. Hall, Edwin A. Hamilton, Walter H. Hamilton.

Arthur M. Hauer, G. T. Harding, Jr., George T. Harding, III, Earl L. Harney, Frank W. Harrah, Edward W. Harris, I. B. Harris, Louis M. Harris, H. L. Harris, S. A. Hatfield, George A. Haveman, Edward Herbst, William C. Heintz, E. D. Helfrich, F. A. Heckler, C. H. Hoffman, C. D. Hoy, George W. Hoglan, E. G. Horton, George O. Hoskins, Wm. A. Humphrey, Carl A. Hyer, Austin Hutt, W. D. Inglis, L. N. Jentgen, J. D. Kessler, F. L. Keiser, Louis Kahn, M. P. Kanter, G. W. Keil, O. E. Kline, Herman W. Koerper, C. C. Kirk, J. E. Kerschner, R. A. Kidd, R. A. Kidd, Jr., Roy E. Krigbaum, E. T. Kuhn.

R. B. Lawyer, F. F. Lawrence, A. K. Lawrence, Albert B. Landrum, L. F. Lauf, H. E. LeFever, W. E. Lloyd, E. C. Ludwig, Alfred B. Lippert, W. Eugene Masters, Louis Mark, C. S. McCafferty, Frank McCafferty, E. F. McCampbell, J. K. McCready, A. B. McConagha, J. A. McClure, Wm. H. McKibben, R. W. McGuinness, C. W. McGavran, John H. Mitchell, H. R. Mitchell, Harry A. Minthorne, M. E. Millhon, W. F. Millhon, W. H. Miller, Myron D. Miller, Joseph Harry Miller, George Wm. Miller, Willis B. Merrill, Russell G. Means, John W. Means.

Link M. Murphy, C. W. Mummert, G. W. Mosby, W. B. Morrison, D. L. Moore, John E. Monger, Harry E. Myers, W. D. Murphy, M. F. Osborn, Edith M. Offerman, W. E. Obetz, G. B. Nessley, B. C. Neiswander, G. I. Nelson, C. D. Postle, H. M. Platter, E. F. Peinert, Chas. W. Pavey, E. M. Parrett, John W. Parker, Harry Prushing, C. O. Probst, Wm. H. Pritchard, Jos. Price, A. W. Prout, Dan Price, Philip J. Reel, W. S. Rhodes, J. A. Riebel, M. E. Reeder, John Rauschkolb, Ralph E. Ramey, J. M. Rector, Edward Reinert, Frank Ray, Rush Robinson, E. H. Ryan, L. J. Roth, Andrews Rogers, R. A. Rogers, Elmer J. Rodenberg, C. C. Ross.

H. M. Sage, D. G. Sanor, Thos. D. Santurello, P. D. Scofield, Henry H. Schwarzell, Ernest Scott, George C. Schaeffer, Frank F. Schmidt, G. H. Shawaker, A. H. Sealy, E. R. Shaffer, John W. Sheetz, H. E. Secrest, C. E. Sharp, I. W. Sherwood, E. R. Shilling, A. J. Shoemaker, G. M. Sherman, C. M. Shepard, Charles J. Shepard, G. H. Snyder, H. H. Snively, J. C. Sommer, Carl L. Spohr, C. H. Solomonides, H. Shamansky, Wm. A. Stoutenborough, J. S. Stevens, Edwin J. Stedem, F. L. Stillman, J. A. Stout, F. M. Stanton, M. E. Swinehart.

C. F. Thompson, Andrew Timberman, John M. Thomas, F. W. Thomas, Wells H. Teachnor, Wells Teachnor, Sr., Ralph B. Taylor, Sterling B. Taylor, C. B. Tanner, Murrell H. Turton, E. A. Thrall, E. W. Troutman, J. H. J. Upham, C. M. Valentine, Thomas A. Vogel, J. Clyde Vanneter, L. H. VanBuskirk, Wm. S. VanFossen, Albert B. Walton, F. C. Wagenhals, Frank Warner, James H. Warner, Frank W. Watson, C. H. Wells, M. Grace Welch, Fred H. Weber, Howard Whitehead, P. B. Wiltberger, J. C. Williamson, P. W. Willey, Ida M. Wilson, E. H. Wilson, G. L. Williams, T. R. Williams, Roderick B. Wittich, Roy C. Wolcott, John W. Wright, Ada V. Wright, Frank C. Wright, C. H. Wyker, Luke V. Zartman.

Fulton—George McGuffin. *Gallia*—Leo C. Bean, S. L. Bossard. *Geauga*—C. F. Gilmore. *Greene*—Paul D. Espey, R. H. Grube, C. E. Kennedy, Ben R. McClellan, T. F. Myler, A. C. Messenger, H. C. Messenger, C. G. McPherson, Hugh C. Schick, L. W. Sontag, A. N. Vandeman. *Guernsey*—D. L. Cowden, C. A. Craig, W. L. Denny, C. C. Headley, M. S. Lawrence, W. W. Lawrence, F. Gordon Lawyer, W. C. McCormick, H. R. Nelland, A. G. Ringer, B. A. Souders, George F. Swan, C. L. Vorhies, E. E. Vorhies.

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Ohio Physicians on Goiter Program at Seattle

A number of Ohio physicians are scheduled for essays at the annual meeting of the American Asociation for the Study of Goiter, to be held at Seattle, Washington, July 10, 11 and 12.

Dr. E. R. Arn, Dayton, is president of the association. In his presidential address he will discuss the subject, "Auricular Fibrillation Associated with Hyperthyroidism".

Dr. Norris W. Gillette, Toledo, will present a paper on "Complications Following Thyroidectomy". One on "End Results of Malignant Goiter" will be read by Dr. Allen Graham, Cleveland.

"The Relation of Endemic Goiter to Mental Efficiency" is the subject of a discussion to be presented by Dr. O. P. Kimball, Cleveland. Dr. E. P. McCullagh, Cleveland, will speak on "The Relation of Carbohydrates to the Calcium and Phosphorus Metabolism in Tetany".

New Licenses in Ohio

Reciprocity licenses to practice medicine and surgery in Ohio have been granted to the following by the State Medical Board: David Lynn Beers, Youngstown, University of Michigan; George E. Chittenden, Akron, Indiana University; Chester W. Dewalt, Petersburg, University of Pittsburgh; John J. Faust, Cleveland; University of Arkansas; William P. Garver, Cleveland, Cornell Medical College; Maurice Grozin, Cleveland, Yale University; Herbert E. Koepke, Cadiz, State University of Iowa; John L. Lavan, Toledo, University of Michigan; Lawrence C. Meredith, Cleveland, University of Colorado; John Noll, Jr., Youngstown, Cornell Medical College; Leon E. Peeler, Sandusky, New York University; Julia K. Pronty, Cleveland, Meharry Medical College; George B. Reese, North Fairfield, McClellan National Normal College of Medicine and Surgery; John D. Sugrue, Toledo, University of Michigan; William D. Tillson, Columbus, University of Virginia; McKinley Voorhies, Cleveland, Meharry Medical College; Lawrence W. Weller, Cleveland, University of Michigan.

Renewal of Narcotic Permits Now

Federal permits for the dispensing and prescribing of narcotics must be renewed by physicians on or before July 1. Physicians desiring to renew their permits should send remittances for the tax of $1 under the Harrison Narcotic Act to the collectors of internal revenue in their districts on or before that date to avoid a penalty of 25 per cent.

Those making application for first registration should do so on Form 678 A. Form 678 should be used by physicians applying for renewal of their permits.

Detailed data on the filing of applications for permits and on the various rules and regulations governing the dispensing and prescribing of narcotics and the keeping of records was published in the April, 1930, issue of *The Journal*, pages 341-342, and in the June, 1929, issue, page 496. All physicians are advised to refresh their memory on the narcotic regulations by reading these two articles.

A vacancy in the position of associate medical officer in the U. S. Public Health Service at Ellis Island and Detroit has been announced by the U. S. Civil Service Commission. Applications for the position must be in the hands of the commission by June 30.

Deaths in Ohio

Richard C. Belt, M.D., Milford; Medical College of Ohio, 1873; aged 81; member of the Ohio State Medical Association and the American Medical Association; died April 24 in Christ Hospital, Cincinnati. Dr. Belt had practiced in Milford since his graduation, and had been active in the Clermont County Medical Society, and in civic and social work in his community. Mrs. Belt died April 15, and her passing was thought to have hastened his death.

Samuel H. Elliott, M.D., Ada; Starling Medical College, 1883; aged 76; died April 26 of chronic nephritis. He had practiced at Spring Hills, Champaign county from graduation to 1901, except for a brief interval at Anna, and since 1901 had practiced at Ada; served as surgeon with the S.A.T.C. at Ohio Northern University during the World War. He is survived by his widow, three sons, and a sister.

Guy T. Goodman, M.D., Mansfield; Western Reserve University, Cleveland, 1898; aged 59; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 28, following a stroke of apoplexy. Dr. Goodman had practiced in Mansfield for 30 years and has served as coroner of Richland County, and at another time, as health officer of Mansfield. He is survived by his widow and his mother.

Regis H. Grace, M.D., Dennison; Eclectic Medical College, Cincinnati, 1899; aged 54; member of the Ohio State Medical Association and Fellow of the American Medical Association; died May 3 of pneumonia. Dr. Grace had practiced in Dennison since his graduation, and at the time of his death was a member of the Dennison health board. He is survived by his widow, two sisters, and two brothers.

W. L. Griffith, M.D., Pedro; Miami Medical College, Cincinnati, 1893; aged 73; former member of the Ohio State Medical Association; died at Marting Hospital, Ironton, April 21, from injuries sustained when his automobile struck a tree. It is believed he had suffered a stroke of paralysis, causing him to lose control of his machine. Dr. Griffith had practiced for many years in Lawrence County. He is survived by his widow, one son, and two daughters.

George H. Heard, Mt. Vernon; licensed 1896; aged 86; died April 16 after a long illness. He was a veteran of the Civil War. He was a member of Starling Medical College, class 1870, and had practiced in Indiana, Tennessee, and Chillicothe, Ohio, before locating in Mt. Vernon. Surviving him are his widow, and one son, a sister and two brothers.

Delbert E. Hoover, M.D., Warren; Western Reserve University, School of Medicine, Cleveland, 1895; aged 59; member of the Ohio State Medical Association; Fellow of the American Medical Association; and Fellow of the American College of Surgeons; died April 12, after an illness dating from last December. He had practiced in Warren for 34 years, with exception of a period spent in post graduate study abroad, and later, during his service in the World War, 1917 to July, 1919. He is survived by one brother, Dr. Charles S. Hoover, of Cleveland, and two sisters.

William A. Koch, M.D., Bucyrus; Cleveland University of Medicine and Surgery, 1895; aged 58; former member of the Ohio State Medical Association; died April 26 of cerebral hemorrhage. He had practiced in Bucyrus since 1896 until his retirement a few years ago.

Samuel M. Mehaffey, M.D., Dennison; Baltimore Medical College, 1892; aged 67; former member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 11 of heart disease. Dr. Mehaffey had practiced continuously for 38 years in Belmont and Tuscarawas counties. He is survived by his widow and his mother, three sisters and three brothers.

Timothy R. Mason, M.D., Columbus; Starling Medical College, Columbus, 1885; aged 78; died April 26. Dr. Mason practiced in Fairfield County before locating in Columbus in 1914. Surviving are his widow, a son and two daughters.

John J. Moore, M.D., South Charleston; College of Physicians and Surgeons, Baltimore, 1893; aged 67; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 12 of heart disease. Dr. Moore has practiced in South Charleston for 37 years. He was a member of the Board of Examiners during the World War, and was a former president of the Clark County Medical Society. His widow and one son survive him.

William S. Reed, M.D., Stockton; Miami Medical College, Cincinnati, 1893; aged 70, former member of the Ohio State Medical Association; died April 25 of diabetes. Dr. Reed had practiced in Butler County since his graduation, and for a number of years was physician for the County Home. He was a brother of the late Dr. C. A. L. Reed, of Cincinnati.

Charles Taylor Smith, M.D., Columbus; Meharry Medical College, Memphis, Tennessee, 1895; aged 64; died May 1 of pneumonia. He had practiced in Columbus for 31 years. Surviving him are his widow, two daughters, and a son, Dr. C. C. Smith, of Columbus.

Clovis M. Taylor, M.D., Columbus; Cleveland College of Physicians and Surgeons, 1886; aged

65; died April 15. Dr. Taylor had lived in Columbus for 42 years, and for many years was chief medical examiner of the National United Commercial Travelers. He is survived by his widow, one brother and three sisters.

Milton E. Williamson, M.D., Dayton; Medical College of Ohio, 1858; aged 70; died April 28. He had practiced in Dayton for 20 years before his retirement ten years ago. His widow survives him.

NEWS NOTES of OHIO

Ashland—Dr. George Emery, who has been practicing with his father, Dr. W. F. Emery, has opened his own office.

West Union—Dr. Lester Purdin, formerly of Fayetteville, has moved to West Union.

Cincinnati—The new Committee on Maternal Health of the Cincinnati Academy of Medicine was addressed recently by Dr. Samuel R. Meeker, professor of gynecology at the Boston University School of Medicine.

Columbus—Dr. Russell G. Means is the new president of the University Club of Columbus.

Martins Ferry—Dr. Stephen A. Harris is taking post-graduate work at Vienna.

Middletown—Dr. D. F. Gerber will leave soon for Europe for an indefinite visit at medical centers. He will be accompanied by Mrs. Gerber, their two sons, and a niece, Miss Helen Gerber.

Salem—Dr. T. T. Church was elected president of the Northeast Ohio Homeopathic Medical Association.

Akron—Under the direction of Dr. A. S. McCormick, the Doctors' Orchestra gave the second of its 1930 series of hospital concerts at the Akron Children's Hospital.

Cincinnati—"Medicine As a Career" was the subject of a talk made by Dr. Francis X. Siegel to the freshmen of St. Xavier College's orientation class.

Zanesville—Dr. Alvin E. Walters has been promoted to the office of lieutenant colonel in the Medical Division of the United States Reserve Officers' Corps. Dr. Walters, an overseas veteran, was mustered out of active service with the rank of major.

Columbus—Dr. P. W. Palmer was slightly burned about the face when he tried to extinguish a fire in the basement of a neighbor's house.

Circleville—The offices of all members of the Pickaway County Medical Society will be closed on Wednesday afternoons during June, July, August and September.

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PROMPT AND FULL REPORT

Cincinnati—The annual reunion of the Alumni Association of the University of Cincinnati, College of Medicine, will be held Friday, June 13, at the Gibson Hotel. A golf tournament will precede the annual banquet, the feature of the reunion.

Toledo—Dr. T. J. Murphy addressed the New York Roentgen Ray Society on "Diagnosis of Post-operative Intestinal Obstruction".

East Liverpool—Dr. E. W. Miskall spoke on "The Prevention of Tuberculosis", before the local Lions' Club.

Portsmouth—Dr. C. W. Wendelken has been elected lieutenant governor for the southern and western Ohio district of the Civitan Club.

Portsmouth—Dr. and Mrs. A. B. Quasser are in New York City where Dr. Quasser is taking a three-months special course in a New York hospital.

Leipsic—Dr. Frederick Maurer, Lima, was the guest speaker at a recent meeting of the Leipsic Commercial Club.

Bedford—A talk on blood pressure was made by Dr. S. R. Burlage at a meeting of the local Lions' Club.

Cincinnati—A testimonial dinner in honor of Dr. C. S. Bonifield was held May 21 at the Gibson Hotel. Dr. Bonifield, nationally prominent surgeon and gynecologist, has been in charge of the department of gynecology at the University of Cincinnati, College of Medicine, since 1910. He is a former president of the Ohio State Medical Association.

Delphos—Dr. Eugene Ockuly, son of Dr. and Mrs. J. F. Ockuly, is in Europe attending clinics at the various medical centers.

Pomeroy—Announcement has been made of the marriage of Miss Genevieve Godfrey, Columbus, and Dr. M. S. Daniels, of this city.

Lorain—A talk on medicine as a professional career was made to students at the local high school by Dr. D. D. Thomas.

Perrysburg—Dr. M. H. Bowers, who has been a member of the surgical teaching staff at the University of Michigan, College of Medicine, has returned to Perrysburg and has opened offices.

Cleveland—Dr. J. M. Rogoff, a member of the faculty at the Western Reserve University, School of Medicine, has left for an extended western trip. He has been invited to address the San Francisco and Denver Academies of Medicine.

Cuyahoga Falls—Dr. D. F. Mathias is taking post-graduate work at the Harvard University School of Medicine.

Athens—A brief history of medicine and surgery was traced by Dr. Blaine R. Goldsberry at a recent meeting of the Athens Rotary Club.

Troy—Dr. Frank Hudson, who is finishing his internship at the Springfield City Hospital, has

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announced that he will open offices here. He is the son of W. R. Hudson of this city.

Columbus—Dr. J. R. Shoemaker, Cuyahoga Falls, has been reappointed by Governor Cooper as a member of the State Medical Board. His term of office is for six years.

Columbus—Dr. E. J. Emerick has resigned as director of the State Bureau of Juvenile Research and has sailed for a trip abroad before resuming his private practice in neuro-psychiatry.

Cincinnati—Mayor Russell Wilson has appointed Dr. William Muhlberg as a member of the Cincinnati Board of Health, succeeding Dr. A. Graeme Mitchell, resigned.

Marion—Nurses of the Marion City Hospital gave a party honoring Dr. August Rhu on his eighty-first birthday. Dr. Rhu is a patient at the hospital, recovering from injuries received in a recent automobile accident. His son, Dr. Herman Rhu, who also was hurt, has left the hospital.

Alliance—Physicians of Alliance are backing a move to have the City Hospital start a library for the use of patients.

Cleveland—The Cleveland Academy of Medicine, through its Committee on Health Education, is providing a column which appears three times a week in *Cleveland Press.*

Cleveland—Dr. Charles Singer, London, England, one of the world's foremost authorities on medical history, addressed the Cleveland Medical Library Association on "Anglo-Saxon Magic and Medicine".

Cleveland—Dr. A. G. Cranch was appointed chairman of the Public Health and Hosiptal Committee of the Lakewood Chamber of Commerce.

Cleveland—Dr. W. E. Bruner has returned from a six-weeks holiday at Sarasota, Florida.

Cleveland—Dr. and Mrs. H. C. Luck have returned from a visit in the West Indies.

Cleveland—Dr. and Mrs. Harry B. Kurtz are on a vacation in Europe.

Evidence revealing a definite relationship between mental deficiency and crime is found in a recent investigation made by a Detroit municipal judge in cooperation with a psychopathic clinic. Of 100 unselected felons sent to the clinic without regard for sex, age or condition, only three were found with no essential mental defects. Two of the number were found to be definitely insane; 33 feeble-minded; 25 of inferior intelligence and the rest possessing deviations in personality which were a handicap to social adjustment. Seventy-three of those examined were listed as poor community risks. The majority of those selected were found to have long police records.

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A school has been opened at the Mahoning Tuberculosis Sanatorium, Youngstown. The teacher, Miss Irene Welsh, is conducting her work under the direction of the Superintendent of Schools. The expense of the school is defrayed by the Christmas Seal Funds. Fourteen boys and girls are attending the school, three days each week.

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News Notes From County Societies and Academies

First District

ACADEMY OF MEDICINE OF CINCINNATI

(Edward King, M.D., Secretary)

April 28—Regular meeting at the Chamber of Commerce. Program: Symposium on Traumatic Surgery. "Compound Fractures—Chest Injuries", by Dr. Louis Feid, Jr.; "Brain Injuries and Fractures of the Skull", by Dr. John A. Caldwell; "Non-penetrating Traumatic Injuries of the Abdomen, Rupture of the Liver, Spleen, Kidneys and Hollow Viscera", by Dr. Dudley W. Palmer.

May 12—No regular meeting. Members of the Academy were invited to attend the Florence Nightingale Birthday program, at Emery Auditorium, under the auspices of the Council on Nursing of the Public Health Federation.—Bulletin.

Adams County Medical Society held its regular meeting on Wednesday, April 23, at West Union. The program included transaction of miscellaneous business, and the following papers: "Work of the Commissioner of Health in Combatting Tuberculosis", by Dr. S. J. Ellison, of West Union; "Physical Diagnosis of Pulmonary Tuberculosis", by Dr. L. H. Senteff, Chillicothe; "The Part of the County Health Nurse in Combatting Tuberculosis", by Mrs. Leota McKee, West Union. The meeting was followed by a dinner at the Northside Hotel.—Bulletin.

Clermont County Medical Society met in the School Auditorium, Owensville, on Wednesday afternoon, April 16. Dr. Walter R. Griess, of Cincinnati, presented a paper on "Medical and Surgical Aspect of Gastric Ulcer, with Special Reference to Medical Treatment".—Allan B. Rapp, Secretary.

Fayette County Medical Society held its regular May meeting on Thursday afternoon, May 1 at the Y. M. C. A., Washington C. H. The local City and County Board of Health Commissioner gave a brief report of his department's work of interest to the Medical Society. Dr. Paul D. Scofield, Columbus, gave a very interesting talk on "Spinal Anesthesia and Its Field of Use".—J. F. Wilson, Secretary.

Highland County Medical Society entertained the Five-County Medical Society with a dinner at Hotel Parker, Hillsboro, Wednesday, April 2. Dr. John E. Greiwe, Cincinnati, spoke on "Hypertension with Some Newer Phases of the Circulation".—News Clipping.

Second District

Greene County Medical Society held its regular meeting on Friday, May 2, at the Iron Lantern,

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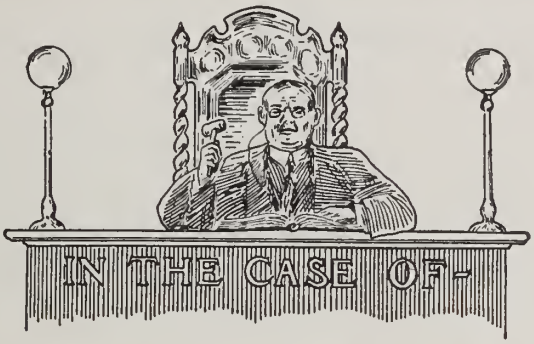
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Xenia. "Some of the Laboratory Aids to Diagnosis", was the subject of an address by Dr. T. F. Myler. Luncheon followed the meeting.—News Clipping.

Miami County Medical Society met at Memorial Hospital, Piqua, on Friday, May 2. The program included an address on "Childhood Behavior Problems", by Dr. R. C. Beery, who has devoted much time to this problem, and a paper on "Surgery of the New Born", by Dr. Burton L. Hyde. —Bulletin.

Montgomery County Medical Society held its regular meeting on Friday evening, April 18 in the Fidelity Building, Dayton. The program consisted of a symposium on Industrial Health Problems, as follows: "Some Facts about Compensation Law", by Dr. Henry Snow; "Relationship of Chronic Diseases to Compensable Accidents", by Dr. M. M. Shafer; "Surgical Shock in First Aid Work", by Dr. J. C. Walker; "Industrial Health Problems", by Dr. C. O. Sappington, Director of Research for the National Safety Council, Chicago. His lecture was illustrated, and outlined some interesting problems in this field of work.

May 2—Regular meeting was held at St. Elizabeth's Hospital, with presentation of the following program:

"Congenital Hearts in the First Two Years", Dr. S. H. Ashmun; "Carcinoma of the Prostate", "Carcinoma of the Bladder", Dr. C. D. Padan; "Complicated Mastoiditis", Dr. R. S. Binkley; "Carcinoma of Buccal Mucous Membrane", Dr. Curtiss Ginn; unusual case of "Stone in the Bladder", Dr. C. J. Derby; "Gun-shot Wounds of the Liver", Dr. R. L. Johnston; "Metastatic Hypernephrona Simulating Primary Bone Tumor"; "End Results of Bunion Operations" (Hallux Valgus), and "Forceful Correction of Flat Feet", Dr. J. A. Judy; "Congenital Heart Disease", Dr. C. R. Weis.—Bulletin.

Shelby County Medical Society held its regular meeting on Friday May 2 in the Chamber of Commerce rooms, Sidney, with a good attendance present. Dr. L. C. Pepper, Sidney, gave a very fine paper on "Peptic Ulcer", which showed that he had put in great deal of time and thought in preparation.—B. S. Stephenson, Secretary.

Third District

Hancock County Medical Society met at the Elks Home in Findlay on Thursday evening, April 17. The speakers were Dr. A. H. Waterman, Chicago, who spoke on "Importance of Diagnostic Survey". Dr. Frank Weiland, also of Chicago gave a technical address on urology.—News Clipping.

Logan County Medical Society held its regular meeting on May 2 with a good attendance of associate members of the dental profession. Dr. J. C. Longfellow read an excellent paper on "Focal

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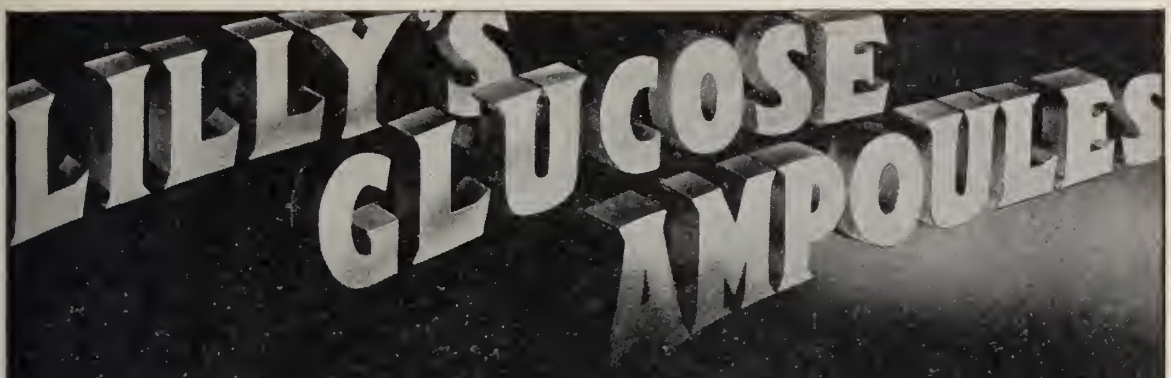
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Infection From a Dental Standpoint". Every member present entered into the discussion. Dr. H. L. Mikesell's paper on "Rabies" with demonstration of Negri bodies was postponed. There was some discussion of a recent diagnostic health clinic held in Bellefontaine, and plans were brought forward for coping with the cases of tuberculosis in this and adjoining counties.—O. C. Amstutz, Secretary.

Marion County Academy of Medicine held its regular meeting at the Harding Hotel, Marion, on Wednesday evening, April 2. Dr. Paul J. Stueber, Lima, gave a talk on "Diseases Affecting the Sinus".—News Clipping.

Seneca County Medical Society held a dinner meeting at the Shawhan hotel, Tiffin, on Thursday evening, April 24. The program consisted of a motion picture clinic, consisting of medical and surgical films from the library of the Eastman Kodak Company and prepared under the direction of the American College of Surgeons.—News Clipping.

Fourth District

TOLEDO ACADEMY OF MEDICINE

(A. P. Hancuff, M.D., Secretary)

May 2—General Meeting of the Academy; buffet supper at the University Club following the program which consisted of Memorial Exercises and a paper on "A New Conception of Gall-Bladder Disease", with lantern slide demonstration, by Dr. M. E. Blahd, Cleveland.

May 9—Section of Pathology, Experimental Medicine and Bacteriology. Program: "Infantile Eczema", by Dr. D. C. Mebane; "Scabies, Its Complications and Diagnosis", by Dr. H. J. Parkhurst; "A Case of Pancreatic Calcification", by Dr. L. A. Levison; "A Case of Extravasation of Urine, with Recovery", by Dr. L. P. Dolan.

May 16—Medical Section. Program: "Some Confusing Problems of the Mediastinum" (case report) by Dr. C. J. Czarnecki; "Rat Bite Fever" (case report), by Dr. N. P. Stauffer; "Brain Tumor" (case report), by Dr. R. E. Boice; "Narcolepsy", by Dr. L. A. Miller.

May 23—Surgical Section. Program: "Dystocia Due to Hydrocephalus, with a Monstrosity", illustrated with motion pictures (case report), by Dr. N. E. Fisher; "Infection of Scalp" (case report), by Dr. P. R. Ensign; "Congenital Dislocation of Hip", illustrated with motion pictures (case report), by Dr. B. G. Chollett; "Missed Abortion" (case report), by Dr. M. W. Diethelm. —Bulletin.

Putnam County Medical Society held its regular monthly meeting Tuesday evening, May 6, with a program devoted to discussion of "Diagnosis of Tuberculosis", with Dr. J. V. Pace, Lima, superintendent of the Lima District Tuberculosis Sanatorium, and Dr. F. B. Anderson, Mt. Vernon, superintendent of the Ohio State Sanatorium, as speakers.—News Clipping.

Fifth District

ACADEMY OF MEDICINE OF CLEVELAND

(Claude D. Waltz, M.D., Secretary)

May 2—Clinical and Pathological Section. Program: "Sarcoma of Caecum—One Case", by Dr. Frank J. Gallagher; "Paget's Disease—One Case", by Dr. F. W. Milward; "Traumatic Rupture of Jejunum without External Wound—One Case", by Dr. J. E. Hannibal; "Juvenile Neurosyphilis—Taboparetic Type—One Case", by Dr. E. J. Stefanic; "Generalized Lymphadenoma Luetic—One Case", by Dr. L. J. Carson; "Traumatic Rupture of Kidney—One Case", by Dr. W. J. Manning; "Two Cases of Severe Secondary Anemia—Unusual Etiology", by Dr. F. J. Doran; "Tumor of Spinal Cord; Tumor of Brain", by Dr. R. K. Updegraff; Demonstration of Pathological Specimens by Dr. H. Sneiderman.

May 9—Experimental Medicine Section. Program arranged by the Department of Surgery: "The Initiation of Traumatic Shock", by Dr. S. O. Freedlander; "Studies in Postoperative Complications", by Dr. Hiram O. Studley; "The Effect of Pericardiotomy upon the Mechanics of the Circulation", by Dr. Claude S. Beck, and (by invitation) Dr. Wm. V. Cox; "Pericardiectomy in the Treatment of Adhesive Pericarditis (Pick's

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May 16—Regular Academy Meeting. Program: "Thyroidectomy—Indications, Methods, Complications, End-Results", by Dr. George W. Crile.

May 28—Pediatric Section. Program: "Lymphoma of the Mediastinal Glands", by Dr. Warren C. Fargo; "Variability in the Weights of White Infants", (stereopticon), by Dr. C. T. J. Dodge; "Importance of Substances other than Pollens in the Etiology and Treatment of Hay Fever in Children", by Dr. Milton B. Cohen; "Physical Findings in the Routine Examination of School Children", by Dr. Justin A. Garvin; "Common Skin Disorders of Children, Diagnosis and Treatment", by Dr. H. N. Cole.—Bulletin.

Erie County Medical Society held its regular meeting at Hotel Rieger, Sandusky, on Wednesday, April 23. Dr. Edward Gillette, of Toledo, addressed the society on the topic of "Fractures". —News Clipping.

Lorain County Medical Society held its May meeting at the Elyria Memorial Hospital, Tuesday, May 6, commencing with a five o'clock dinner. The following program was presented: "Roentgen Ray Examination of the Gall Bladder", by Dr. George W. Blank, Lorain, with discussion by Drs. A. S. McKitrick, Elyria, and Drs. R. A. and L. A. Stack, Lorain.—Bulletin.

Sixth District

Mahoning County Medical Society held a joint meeting with the Youngstown Dental Society on April 24, with a dinner at the Youngstown Club. W. H. G. Logan, M.D., D.D.S., of Chicago, the visiting speaker, discussed "The More Common Surgical Lesions of the Mouth and Jaws, and a Brief Review of the Problem of Dental Focal Infections".—Bulletin.

Portage County Medical Society met on Thursday evening, May 1 at the home of Dr. J. T. Norton, in Kent. Dr. James G. Kramer, of Akron, spoke on "The Nervous Child".—News Clipping.

Summit County Medical Society held its regular meeting at the Akron City Club on Tuesday evening, May 6. A paper on "An Attempt at Evaluation of Roentgenologic Observations on a Physiological Basis", by Dr. Hans A. Jarre, Associate Roentgenologist, Grace Hospital, Detroit. —Bulletin.

Seventh District

Coshocton County Medical Society met at the Nurses Home, Coshocton, Thursday evening, April 24, with thirteen members and 22 nurses in attendance. Dr. W. H. Keenan presented a paper on "The Doctor and the Nurse", and Miss Anna McCabe read a paper on "The Nurse and the Doctor".—News Clipping.

Jefferson County Medical Society held a dinner



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JELLIED VEGETABLE SALAD (*Six Servings*)

	Grams	Prot.	Fat	Carb.	Cal.
1 tablespoon Knox Sparkling Gelatine	7	6	....	....	....
¼ cup cold water, 1½ cups hot water	....	....	....	....	....
1 teaspoonful whole mixed spices	....	....	....	....	....
½ teaspoon salt, ⅓ cup vinegar	....	....	....	....	....
½ cup chopped cabbage	50	1	....	3	....
½ cup chopped celery	60	1	....	2	....
¼ cup canned green peas	40	1	....	4	....
¼ cup cooked beets, cubed	40	1	....	3	....
Total		10	....	12	88
One serving		2	....	2	15

Soak gelatine in cold water for five minutes. Bring to boil water, salt and spices. Pour on gelatine to dissolve it and add vinegar. When jelly is nearly set, stir in the vegetables, pour into mold and chill until firm. Unmold on lettuce and serve with salad dressing. Garnish with sprig of parsley or strip of pimento.

JELLIED CHICKEN IN CREAM (*Six Servings*)

	Grams	Prot.	Fat	Carb.	Cal.
1 tablespoonful Knox Gelatine	7	6	....	....	....
¼ cup cold chicken broth or water	....	....	....	....	....
1¼ cups boiling chicken broth, fat free	....	....	....	....	....
½ teaspoon salt	....	....	....	....	....
Pinch pepper	....	....	....	....	....
1 cup cooked chicken, cubed	125	24	20	....	....
¼ cup cream, whipped	55	1	22	1.5	....
Total		31	44	1.5	526
One serving		5	7	....	88

Soak gelatine in cold liquid for five minutes and dissolve in hot broth. Season with salt and pepper and chill until nearly set. Fold in chicken and whipped cream. Turn into molds and chill until firm. Serve on lettuce or garnish with parsley and strip of pimento.

If you agree that recipes like the ones on this page will be helpful in your diabetic practice, write for our complete Diabetic Recipe Book—it contains dozens of valuable recommendations. We shall be glad to mail you as many copies as you desire. Knox Gelatine Laboratories 434 Knox Ave., Johnstown, N. Y.

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meeting at the Nurses Home of the Ohio Valley Hospital, Steubenville, on Friday evening, April 25, with sixty physicians of the tri-state district in attendance. Dr. Elias Lincoln Stern, Adjunct Attending Surgeon, Syndenham Hospital, and member of the Department of Anatomy of Columbia University, New York City, was the principal speaker of the evening. He discussed and demonstrated his method of varicose vein injections. He also gave an extremely interesting report on the work that he has done in improving the circulation of the lower extremities, particularly in the cases of thrombo-angitis-obliterans. His procedure consists in blocking the twelfth thoracic, first and second lumbar nerve roots with alcohol which eliminates the somatic nerve supply to the femoral and popliteal arteries. An interesting discussion followed Dr. Stern's address.—M. H. Rosenblum, Secretary.

Tuscarawas County Medical Society met in regular session at the Buckeye Hotel, Uhrichsville, on Thursday evening, April 10. The program was presented by Dr. Regis H. Grace of Dennison and Dr. Robert E. Wolf, of Uhrichsville.—News Clipping.

Eighth District

Athens County Medical Society held its regular meeting on Monday, May 5 at the Presbyterian Church, Nelsonville. Following a noon luncheon, Dr. E. E. Campbell, Logan, spoke on the subject of "Coronary Diseases", and Dr. George J. Herr, also of Logan, reported some cases of the diseases.—A. L. Pritchard, Correspondent.

Fairfield County Medical Society met at the Florentine in Lancaster, for a noon luncheon on Tuesday, April 8, with 25 members present. Dr. C. H. Benson, Columbus, spoke on "Tuberculosis". —News Clipping.

Licking County Medical Society held its regular meeting at the Warden Hotel, Newark, on Friday evening, April 25, with members of adjoining County Societies as guests. Following the banquet, Dr. Harry Hall, Wheeling, past president of the West Virginia State Medical Association, spoke on "Specialism", and Dr. R. U. Drinkard, also of Wheeling, spoke on "Surgery of the Chest".—News Clipping.

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

April 14—Regular meeting, at Hutchinson Chapel, White Cross Hospital. Clinical Cases and Demonstrations, as follows: "Carcinoma of Lip", by Dr. Andre Crotti; "Hyperplasia of Mammary Glands", by Dr. Wayne Brehm; "Fracture of the Neck of Femur (non-union)", by Dr. Carl D. Hoy; "Severe Anaemia (Type??) and Purpura Haemorrhagica", by Drs. M. E. and W. F. Millhon; "Toxic Goitre", by Dr. Raymond Ramsey: "Lipoïodine Injection and Thoracoplasty", by Dr. Louis Mark; "Empyema of Gall Bladder", by Dr.

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Wm. P. Smith; "Sinus Disease", by Dr. A. M. Hauer. Members of the Academy participated in the semi-annual clinic day program, with sessions beginning at 7:30 A. M. Dr. Charles P. Emerson, Indianapolis, dean of Indiana University School of Medicine was guest speaker at both the morning and afternoon sessions. The registration reached well over 200.

April 21—Regular meeting at the Public Library: Program: "Diagnosis and Treatment of Meningococcic Meningitis", by Dr. S. A. Edelman, with discussion by Drs. E. G. Horton and Orville Baldwin; "The Hormone Test for Pregnancy", by Dr. H. L. Reinhart, with discussion by Drs. R. E. Krigbaum and Wayne Brehm.

April 28—Dinner meeting at the Y. W. C. A. Rev. M. H. Lichliter, Pastor of the First Congregational Church, spoke on "Cults and Medicine". —Bulletin.

Alumni Reunion Plans, College of Medicine, University of Cincinnati

More than 3000 invitations have been distributed for the annual reunion of the Alumni Association of the College of Medicine, University of Cincinnati, to be held June 13 and 14, according to an announcement by Dr. Parke G. Smith, president of the Alumni Association.

The opening event on the two-days program will be a golf tournament at the Hyde Park Country Club on Friday, June 13. Dr. Louis Feid, Jr., is chairman of the committee on arrangements for the tournament. Physicians desiring to enter the contest should notify Dr. Feid.

The annual banquet, one of the chief features of the gathering, will be held Friday evening, June 13, at the Gibson Hotel. Dr. William Abbott is chairman of the banquet committee. A varied and entertaining program, to be followed by dancing, has been arranged. Several speakers of national reputation have been invited to address the banquet guests.

The reunion committee will make a special effort this year to get out-of-town members of the Alumni Association to attend. Separate secretaries for the various graduating classes have been appointed by Dr. Smith. The University's graduating exercises will be held Saturday, June 14, in Nippert Stadium to which all medical graduates have been invited. The homecoming dinner will be held on Saturday evening.

Those handling arrangements and details for the College of Medicine reunion, besides those already mentioned, are Drs. Henry Brown, H. Ratterman, Frank Cross, Carl A. Wilzbach, H. Freiberg, W. D. Haines, D. D. Davies, Stanley Dorst, Martin H. Fischer, Alfred Friedlander, A. C. Bachmeyer and Charles A. Neal.

Miss Lucile Hook is serving as secretary of the committees. All communications should be sent to her at the Medical College.

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PUBLIC HEALTH NOTES

—The tuberculosis death rate in Ohio in 1929 was 67.36, the lowest in the history of the state, according to the State Department of Health. Data shows that for 1929 there was an increase of cases reported over 1920 of 1891 and a decrease of deaths of 1351. Cases reported in 1929 numbered 8057 and the deaths totaled 4581. The number of cases reported in 1920 was 6166 and the number of deaths 5932, the death rate in 1920 being 102.01. Conclusions drawn by the state department, based on the data, are: Case reporting has become a more regular routine by physicians; factors used in the control of tuberculosis are functioning smoothly; many cases are not being placed under observation early enough.

—The City of Sidney won the first award in Class Five in the Health Conservation Contest inaugurated by the Chamber of Commerce of the United States, it has been announced. The City of Cincinnati won honorable mention in Class Two.

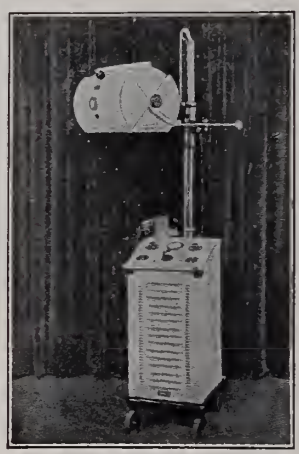
—Three recent typhoid outbreaks in Ohio have been investigated by the State Department of Health. The outbreak at Brunswick, Medina County, claimed 24 persons, three of whom have died. There were four cases with one death at Doylestown, Wayne County. Fourteen persons contracted the disease at the Convent of the Precious Blood, Montgomery County. The Montgomery County outbreak was traced to contaminated water. The other two outbreaks were traced to raw milk. Statistics of the State Department of Health show a steady decline in typhoid cases and deaths since 1920. In 1920, there were 3004 cases and 436 deaths reported; in 1929, 896 cases and 145 deaths.

—Dr. Edward Blair, Lebanon, was elected president of the Southwestern Ohio Health District. Dr. W. K. Ruble, Wilmington, was named vice president and Miss Anne Doyle, R. N., Hamilton, secretary.

—Miss Anna Gladwin, Akron, was elected president of the Ohio State Nurses Association at the annual meeting of the association held at Lima. Other officers elected were: Miss Rachel L. Kidwell, Columbus, vice president; Miss Mary L. Margerum, Fostoria, vice president; Miss Elsie Druggan, Athens, secretary, and Miss Gertrude Bush, Toledo, treasurer. Miss Clara F. Brouse, Akron, retiring president, and Miss Louise Schroeder, Dayton, were elected new members of the board of trustees. The 1931 meeting of the organization will be held in Cleveland.

—In a report to State Auditor Joseph T. Tracy, F. M. Hoopengarner, state examiner, recommended that a tuberculosis cottage be built at the Dayton State Hospital for the segregation of male patients.

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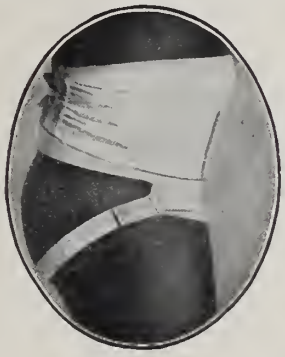
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HOSPITAL NOTES

—A legacy of $18,864 to Mercy Hospital, Hamilton, is provided for in the will of the late Mrs. Lilah Tiest.

—Remodeling and alterations, costing $10,000, have been started at the South Side Unit of the Youngstown Hospital.

—Physicians backing the erection of a hospital at Western Hills, Cincinnati, have announced that a goal of $300,000 has been set.

—A new $42,000 pharmacy has been installed in the Cleveland City Hospital.

—This is the age of nervous intemperance, Dr. C. P. Emerson, dean of the College of Medicine, University of Indiana, declared in an address at the semi-annual clinic at the White Cross Hospital, Columbus. He urged physicians to aid people in budgeting their nervous energy. About 250 physicians from Central Ohio attended the clinic.

—The new 14-room addition to the Greenville Hospital has been opened to the public.

—Many physicians from Western Ohio attended the 11th annual clinic at the St. Rita's Hospital, Lima. Dr. W. McK. Craig, Rochester, Minn., was the guest speaker. Lima physicians who took part were Drs. Charles Gamble, F. G. Maurer, H. F. Webb, William Vorbau, W. W. Beauchamp, F. G. Stueber and Paul Stueber.

—Board of Trustees of the Bucyrus City Hospital are contemplating a $100,000 bond issue for a new institution.

—Shelby Memorial Hospital, Sandusky, was bequeathed $1500 under the will of the late Estella A. Garnhart, Milan.

—Miss Mary Jamison, superintendent of Grant Hospital, Columbus, has been elected president of the Columbus Hospital Association.

—Lancaster City Council has approved plans for the building of an $85,000 addition to the City Hospital.

—The Pennsylvania Railroad has purchased the old Lakeside Hospital site in the heart of Cleveland.

—Announcement has been made that Ted Lewis, jazz band leader, will furnish one room at the new Circleville City Hospital in memory of his father, the late Ben Friedman.

—Amherst has been selected as the site for Lorain County's new $425,000 sanitarium.

—Statements that Cincinnati is "over hospitalized" have been challenged by Rev. A. C. Lohman, superintendent of the Cincinnati Deaconess Hospital. He also answered those who charge that hospital costs are too high with the statement that no Cincinnati hospital is a money-making institution and that some of them do not even break even financially.

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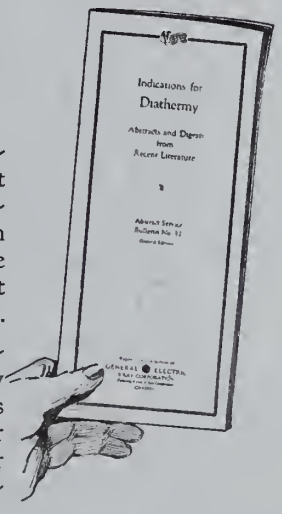


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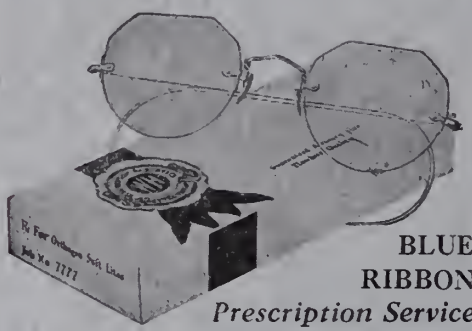
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JULY 1, 1930 VOLUME XXVI
Number - - 7

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Ohio State Medical Journal

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Ninth District
I. P. Seiler, M.D. ..... Piketon

Tenth District
S. J. Goodman, M.D. ..... Columbus

Ex-Officio the ex-President:
A. H. Freiberg, M.D. ..... Cincinnati

CORRECTED ROLL OF DISTRICT AND COUNTY SOCIETIES

Societies	President	Secretary	
First District			
Adams	Ray Vaughn, West Union	O. T. Sproull, West Union	3d Wednesday in April, June, Aug., Oct.
Brown	R. B. Hannah, Georgetown	Geo. P. Tyler, Jr., Ripley	4th Wednesday in Feb., May and Nov.
Butler	Mark Millikin, Hamilton	P. E. Decatur, Hamilton	2d Wednesday, monthly.
Clermont	Thomas Longworth, Felicity	Allan B. Rapp, Owensville	3d Wednesday, monthly.
Clinton	T. E. Craig, Sabina	A. C. Roberts, Wilmington	1st Tuesday, monthly.
Fayette	Roy E. Brown, Washington C. H.	J. F. Wilson, Washington C. H.	1st Thursday, monthly.
Hamilton	Wm. Mithoefer, Cincinnati	Edward King, Cincinnati	Monday evening of each week.
Highland	J. D. McBride, Hillsboro	W. B. Roads, Hillsboro	1st Wednesday in Jan., April, July and Oct.
Warren	Robert Blair, Lebanon	James Arnold, Lebanon	1st Tuesday in May, June, July, Sept., Oct. and Nov.
Second District	P. D. Espey, Xenia	D. B. Conklin, Dayton	
Champaign	V. G. Wolfe, Urbana	L. A. Woodburn, Urbana	2d Thursday, monthly.
Clarke	H. A. McKnight, Springfield	I. H. Boesel, Springfield	2d and 4th Wednesday noon.
Darke	I. H. Hawes, Arcanum	W. D. Bishop, Greenville	2d Thursday each month.
Greene	H. C. Messenger, Xenia	Marshall M. Best, Xenia	1st Thursday, monthly.
Miami	J. E. Murray, Piqua	G. A. Woodhouse, Pleasant Hill	1st Friday, monthly, except July and August.
Montgomery	A. W. Carley, Dayton	Miss M. E. Jeffrey, Dayton	1st and 3d Friday each month.
Preble	George Blackford, Eldorado	C. M. Treffinger, Eaton	3d Thursday, monthly.
Shelby	M. F. Hussey, Sidney	B. S. Stephenson, Sidney	1st Friday, monthly.
Third District	F. M. Douglass, Toledo	E. E. Rakestraw, Findlay	
Allen	Alan Knisely, Lima	James Halfhill, Lima	3d Tuesday, monthly.
Auglaize	Roy C. Hunter, Wapakoneta	G. B. Faulder, Wapakoneta	3d Thursday, monthly.
Hancock	T. A. Spitler, Findlay	J. H. Marshall, Findlay	1st Wednesday, monthly.
Hardin	N. C. Schroeder, Kenton	W. N. Mundy, Forest	1st Thursday, monthly.
Logan	J. P. Harbert, Bellefontaine	A. H. Corliss, Bellefontaine	1st Friday, monthly.
Marion	F. E. Mahla, Marion	Robert G. McMurray, Marion	1st Tuesday, monthly.
Mercer	M. L. Downing, Celina	F. E. Ayers, Celina	2d Tuesday, monthly.
Seneca	R. E. Hershberger, Tiffin	Robert Benner, Tiffin	3rd Thursday, monthly.
Van Wert	J. P. Sampsell, Van Wert	R. H. Good, Van Wert	3d Tuesday, monthly.
Wyandot	B. A. Moloney, Upper Sandusky	J. Craig Bowman, Up. Sandusky	1st Thursday, monthly.
Fourth District	(With Third District in Northwestern Ohio District)		
Defiance	J. J. Reynolds, Defiance	D. J. Slosser, Defiance	3d Thursday, monthly.
Fulton	L. C. Cosgrove, Swanton	Harold Heffron, Metamora	Semi-monthly.
Henry	J. H. Fiser, Malinta	F. M. Harrison, Napoleon	3d Wednesday, monthly.
Lucas	B. J. Hein, Toledo	A. P. Hancuff, Toledo	Friday, each week.
Ottawa	C. J. Yeisley, Port Clinton	E. D. Schuiteman, Genoa	2d Thursday, monthly.
Paulding	Earnest Kohn, Grover Hill	T. P. Fast, Grover Hill	3d Wednesday, monthly.
Putnam	J. R. Echelbarger, Ottawa	W. B. Recker, Leipsic	1st Thursday, monthly.
Sandusky	F. L. Moore, Fremont	E. J. Shanahan, Clyde	Last Thursday, monthly.
Williams	R. Alwood, Montpelier	H. J. Luxan, Montpelier	3d Thursday, monthly.
Wood	E. H. Mercer, Bowling Green	F. V. Boyle, Bowling Green	3d Thursday, monthly.
Fifth District	C. L. Cummer, Councilor	Chrm. Com. on Arrangements	Cleveland.
Ashtabula	A. J. Pardee, Ashtabula	R. B. Wynkoop, Ashtabula	1st Tuesday, monthly.
Cuyahoga	V. C. Rowland, Cleveland	Claude D. Waltz, Cleveland	Every Friday evening.
Erie	J. T. Haynes, Sandusky	G. A. Stimson, Sandusky	Last Thursday, monthly.
Geauga	Clara J. Swan, Chardon	Isa Teed-Cramton, Burton	Last Wednesday, Apr. to Dec.
Huron	John A. Sipher, Norwalk	B. C. Pilkey, Norwalk	2d Thursday, monthly.
Lake	C. H. Browning, Painesville	F. J. Dineen, Painesville	4th Tuesday, monthly.
Lorain	W. S. Baldwin, Lorain	W. E. Hart, Elyria	2d Tuesday, monthly.
Medina	M. F. Miller, Wadsworth	J. K. Durling, Wadsworth	3d Thursday.
Trumbull	Ralph Herlinger, Warren	R. H. McCaughtry, Warren	3d Thursday, monthly, except June, July, August.

Societies	President	Secretary	
Sixth District	H. M. Schuffell, Canton	J. H. Seiler, Akron	2d Wed., Jan., April & Oct.
Ashland	D. L. Mohn, Ashland	H. M. Gunn, Ashland	1st Friday, bi-monthly.
Holmes	J. C. Elder, Millersburg	A. T. Cole, Millersburg	1st Tuesday, quarterly, Jan., April, July, October.
Mahoning	H. J. Beard, Youngstown	J. P. Harvey, Youngstown	3d Tuesday, monthly.
Portage	W. B. Andrews, Kent	E. J. Widdecombe, Kent	1st Thursday, monthly.
Richland	Leopold Adams, Mansfield	D. C. Lavender, Mansfield	3d Thursday, monthly.
Stark	R. J. Shipley, Canton	F. S. VanDyke, Canton	3d Tuesday, Jan., March, May July, Sept., Nov.
Summit	R. E. Amos, Akron	A. S. McCormick, Akron	1st Tuesday, monthly.
Wayne	W. B. Turner, Wooster	R. C. Paul, Wooster	2d Tuesday, monthly.
Seventh District	E. B. Shanley, New Philadelphia	E. D. Moore, New Philadelphia	
Belmont	C. J. Holley, Bridgeport	C. W. Kirkland, Bellaire	2d Wednesday, monthly at 1:45 p.m.
Carroll	(With Stark Co. Society)		
Columbiana	R. T. Holzbach, Salem	T. T. Church, Salem	2d Tuesday, monthly.
Coshocton	F. M. Marshall, Coshocton	J. D. Lower, Coshocton	4th Thursday, April, June, Sept., December.
Harrison	J. M. Scott, Scio	R. P. Rusk, Cadiz	3d Wednesday, monthly.
Jefferson	V. B. Di Loreto, Steubenville	M. H. Rosenblum Steubenville	Last Friday, monthly.
Monroe	G. W. Steward, Woodsfield	A. R. Burkhart, Woodsfield	2d Wednesday, monthly.
Tuscarawas	Jay W. Calhoon, Uhrichsville	R. E. Wolf, Uhrichsville	1st Thursday, monthly.
Eighth District	J. G. Shirer, Newark	H. A. Campbell, Newark	October 3, 1929.
Athens	C. C. Butt, Nelsonville	T. A. Copeland, Athens	1st Monday, monthly.
Fairfield	A. A. Brown, Carroll	C. W. Brown, Lancaster	2d Tuesday, monthly.
Guernsey	C. L. Vorhies, Cambridge	Gordon Lawyer, Cambridge	1st and 3rd Tuesday each month.
Licking	E. A. Moore, Newark	D. A. Skinner, Newark	Last Friday, monthly.
Morgan	D. G. Ralston, McConnelsville	C. E. Northrup, McConnelsville	3d Wednesday, monthly.
Muskingum	W. F. Sealover, Zanesville	Beatrice Hagen, Zanesville	1st Wednesday, monthly.
Noble			First Thursday, monthly.
Perry	R. W. Miller, Hemlock	F. J. Crosbie, New Lexington	3d Monday, monthly.
Washington	J. B. Penrose, Marietta	J. R. Warren, Marietta	2d Wednesday, monthly.
Ninth District			
Gallia	O. A. Vornholt, Gallipolis	Milo Wilson, Gallipolis	1st Thursday, monthly.
Hocking	O. V. Donaldson, Gore	M. H. Cherrington, Logan	
Jackson	Gomer E. Jones, Oak Hill	W. R. Riddell, Jackson	1st Tuesday, monthly.
Lawrence	G. G. Hunter, Ironton	F. R. Stewart, Ironton	1st Thursday, monthly.
Meigs	P. A. Jividen, Rutland	Byron Bing, Pomeroy	1st Thursday, April, July and Oct.
Pike	O. R. Eylar, Waverly	L. E. Wills, Waverly	1st Monday, monthly.
Scioto	T. C. Crawford, Portsmouth	C. M. Fitch, Portsmouth	2d Monday, monthly.
Vinton	O. S. Cox, McArthur	H. S. James, McArthur	3d Wednesday, monthly.
Tenth District			
Crawford	Clarence Adams, Galion	R. M. Malone, Galion	1st Monday, monthly.
Delaware	M. S. Cherington, Delaware	A. R. Callander, Delaware	1st Friday, monthly.
Franklin	R. B. Drury, Columbus	James A. Beer, Columbus	1st four Mondays.
Knox	W. H. Eastman, Fredericktown	J. Shamansky, Mt. Vernon	Last Thursday, monthly.
Madison	R. H. Trimble, Mt. Sterling	H. P. Sparling, London	4th Wednesday.
Morrow	F. E. Thompson, Marengo	Todd Caris, Mt. Gilead	1st Wednesday, monthly.
Pickaway	J. B. May, New Holland	Lloyd Jonnes, Circleville	1st Friday, monthly.
Ross	John Franklin, Chillicothe	W. C. Breth, Chillicothe	1st Thursday, monthly.
Union	F. M. Wurtsbaugh, Richwood	H. C. Duke, Richwood	2d Tuesday, monthly.



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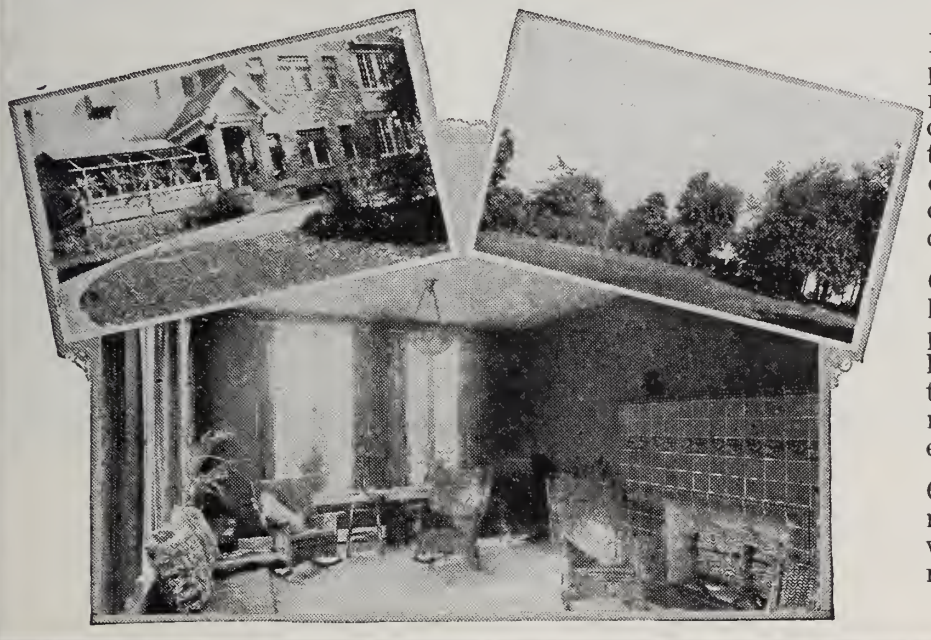
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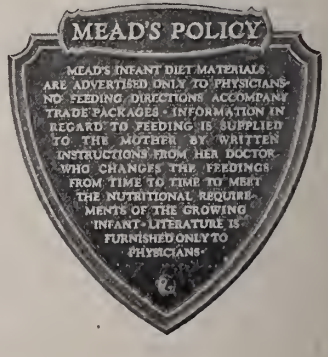
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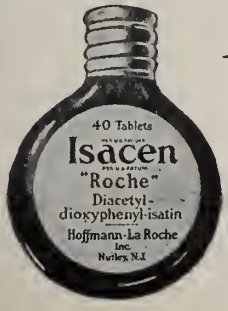


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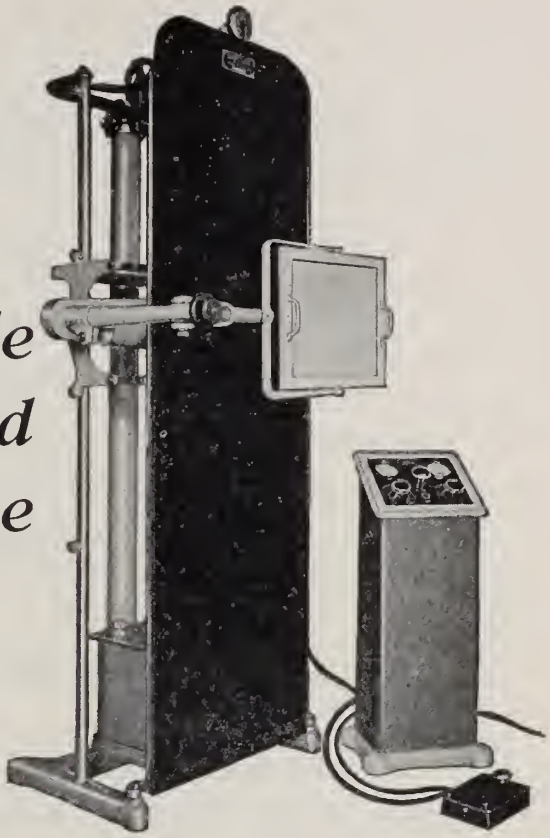
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PUBLIC HEALTH - SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Curtailment of activities is the usual and natural procedure among many of the county medical societies and academies of medicine of the state during the summer months. Some county societies have already suspended their regular meetings and others have lightened to a considerable extent their scientific programs. Vacation time is just around the corner, so many physicians are turning from county society activities to affairs that promise rest and recreation.

No Summer Slack In Organization

However, organized medicine in Ohio must not curtail its activities to such an extent that it will lose that momentum which carried it to new and bigger achievements and accomplishments during the past 12 months.

A new year that promises to challenge the strength, loyalty and energy of the united medical profession of the state made its advent during the recent annual meeting. Programs for meeting some of the newer serious problems and questions pertaining to public health and medical practice have been mapped out and are being initiated. There are numerous questions of vital importance to the public, as well as the medical profession, that demand prompt consideration.

Officers and committeemen of the State Association have already launched on another 12 months of hard work, especially the Committee on Public Policy which for some time past has been studying and reviewing prospective legislation to come before the Eighty-Ninth General Assembly which convenes next January.

These state-wide committees, representing the organized medical profession of Ohio generally, will be able to accomplish little during the summer months unless they have the undivided and active support of the membership of the State Association. Many times, no doubt, they will call on the various county societies and individual members of the State Association for suggestions, advice and service on the numerous questions under consideration. Prompt replies to their queries should be forthcoming.

So, it is quite evident that the various county societies cannot afford to curtail too greatly their summer activities. As many meetings as possible should be held—at least officers and committeemen of the component societies should get together frequently to discuss the important social, economic and legislative problems affecting public health, medical practice, and scientific medicine. Programs and activities for the fall, winter and spring months should be drafted. New and valuable contacts with civic groups should be contemplated and effected.

As one business leader recently remarked: "Never was it more true than today that 'faith without works is dead' ".

Organized medicine in Ohio must continue to function in high speed. It must not permit inertia to replace that energy which has been one of the vital factors in the solution of many of the complex problems of the past.

Public office seekers are busily engaged campaigning for the respective offices they will seek at the approaching August primaries and November election, when selection of practically all county and state public officials will take place.

Qualified Candidates Important

As has been stated previously and often, the medical profession and medical organization, especially, are essentially non-political, but physicians, as individual citizens, because of their prominence and responsibilities, have a serious civic duty to perform with the advent of elections of public officials.

The laity generally look to the medical profession for leadership in public health and medical matters, political or otherwise. So, it is vitally necessary that all physicians interest themselves in the qualifications of the candidates in their respective counties and districts.

Those who follow the work of the Ohio General Assembly agree that the coming session of the Legislature will be the most important in a generation, because it will be called upon to struggle with the revision of the state's taxation code. Also, there are other important legislative matters in the brew which promise to make the 1931 session of the General Assembly confusing and complex.

All of which calls forth the warning that every citizen of Ohio must rally to the challenge to select competent, high-minded, courageous and unselfish legislators for the coming session.

Physicians of Ohio cannot afford to permit this opportunity to exercise their prerogative as

patriotic citizens to pass by without evidencing their civic and public interest.

The first real test for candidates comes at the August primary election which is unusually important, because in so many instances success at the primary is equivalent to election in November. The power of selection by the voters must be exercised at the primary as well as at the fall election.

The Broad Economic Principles

Experiences of the past year, with its acute unemployment situation and financial depression, have demonstrated to the medical man the close relationship that exists between social medicine and the economic order of present-day life.

Whether he wishes it or not, the practicing physician more and more finds himself keenly concerned about some of the important industrial commercial problems that are facing the nation.

Take the unemployment crisis as an outstanding example. It goes without saying that the inability of thousands of men and women to secure or hold positions is reflected unpleasantly on the ledger of the medical profession. Unemployment results in more demands for medical charity, the extension of credit and long delays in the payment of accounts. The physician is one of the first to feel the ill effects of business depression.

This concrete evidence of the effects of broad and general social and economic factors upon medical practice has also illustrated the impracticability of attempting to bring about changes in one unit of the whole economic system without taking into consideration the economic situation as a whole.

As Dr. Olin West has aptly stated it: "When we talk about the high cost of medical care we must take into consideration the whole economic situation as it exists today, and study and analyze it carefully. The cost of medical care is a mere speck on the economic map."

The medical profession usually has listened patiently while outside agencies, social groups and commercial organizations or executives have told him how to run his own business.

The time has arrived for the medical profession to reverse the tables and inform those who have been advising him how and what to do, to put their own houses in order.

The past 12 months have shown the fallaciousness of some of the high-pressure methods of modern business. The attempts to force luxuries on people who are unable to buy them and who can never pay for them has had anything but a beneficial effect. Inflation of production and the over stimulation of the installment-plan and credit buying and selling have driven many families into financial straits.

Business has a deep responsibility to meet in the matter of stabilizing income and educating the public as to more conservative and sounder methods of buying.

Admitting that some readjustments in the relationship between the physician and his patient may be needed and necessary, it is also quite evident that little can be accomplished, either by the medical profession or anyone else, until remedies for a few of the glaring faults of the nation's fundamental economic system are worked out.

It is time for capital and labor to get together on some of the underlying ailments of present-day business. Unemployment is but one of a dozen.

The medical profession stands ready, individually and collectively, to lend its aid and cooperation in sound procedure toward meeting these social and economic problems, for it knows that the economics of medical practice is dependent to a large extent on how well these other broad questions are solved. However, it does dislike being, in fact refuses to be, made the one football of social reformers, textbook economists and philanthropic, but uninformed, individuals who are attempting to solve the nation's ills in an impractical way and with little regard for the general and fundamental principles of economics.

So-Called "Health" Foods

Many food products for which makers claim curative or health-giving properties are under the searchlight of the Food, Drug and Insecticide Administration of the Federal Department of Agriculture and in a statement recently issued by that bureau the American public was warned to discount the claims made for many products which merely possess customary nutritive qualities to be expected in any wholesome food product.

The statement of the bureau said that in enforcement of the food and drugs act it is necessary to warn manufacturers of these products to have their labels conform to the facts of medical science and actual laboratory tests and that the government objects to their giving the impression that the public needs something added to its everyday diet if it is to avoid nutritional disaster.

It also is pointed out that many of the "health-giving" products are not only a waste of money if purchased for their curative properties but are responsible for a more serious loss because their use is relied upon as a substitute for appropriate corrective measures as a proper diet, exercise and sunshine.

This new campaign on the part of the Food and Drug Administration in combatting the marketing of misrepresented "health" products is one of merit. The one fact that too often such products are substituted for scientific corrective

methods in serious ailments is enough to warrant the investigation.

Many who would not think of buying some of the quack remedies for influenza, stomach disorders, etc., are easily victimized by those making extravagant claims for their particular brand of "health" food. The fake remedy marketers were put on the grill during the influenza epidemic last winter. Now the "health food" exploiters are having their inning.

Psychiatry and Criminal Justice

The Cleveland Association for Criminal Justice in inaugurating a new study of the crime problem in Ohio, seeks an answer to the following questions, according to Dan B. Cull, president of the association.

Is the psychiatrist capable of doing all it is claimed for him in solving the tremendous crime problems of today?

Or, should the desires of some judges and law-enforcement officers be heeded and the psychiatrist be excluded from the courts and penal institutions?

Cull announced that more than 100 inmates of penal institutions in this state would be examined in an effort to find an answer to these questions and that the National Crime Commission will be asked to conduct a similar survey among 5000 federal prisoners.

Discussing the subject further, Cull expresses his disapproval of a move to set up a state psychiatric bureau to which all convicted persons would be submitted for examination before being committed to a penal institution, basing his opposition on the "danger of wrong classification and segregation of a prisoner among others with whom his reformation is impossible". He fears that such a state bureau would take away the power of judges and increase the abuses of indeterminate sentence.

It is quite unlikely that anyone believes the psychiatrist alone can solve the crime problem, any more than the courts working single-handed can remedy the situation. The psychiatrist, however, must play a prominent role in any procedure to cope with the problem. Lack of mutual understanding in many instances in the past has undoubtedly brought about a feeling in some quarters that the psychiatrist and the courts must be divorced.

A clearer understanding of the psychiatrist's place in the scheme of criminal justice on the part of both the courts and the psychiatrist himself, and a closer harmony between the two undoubtedly will go a long way toward solution of the crime problem.

Some such understanding may result from the survey to be undertaken by the Cleveland group.

An attempt to formulate some workable program in court procedure which will permit the jurist and the psychiatrist both to operate effectively is not new. It has been the subject of conferences for a decade. Only recently the American Institute of Criminal Law recommended the following program which has a distinct bearing on this question:

1. That in all cases of felony or misdemeanor punishable by prison sentence the question of responsibility be not submitted to the jury, which will thus be called upon to determine only that the offense was committed by the defendant.

2. That the disposition and treatment (including punishment) be based on a study of the individual offender by properly qualified and impartial experts cooperating with the courts.

3. That no maximum term be set to any sentence.

4. That no parole or probation be granted without suitable psychiatric examination.

5. That in considering applications for pardons and commutations, careful attention be given to reports of qualified experts.

Numerous Survey Boards

Governmental commissions, charged with the duty of studying and reporting findings on some of the civic and social problems confronting the nation, are quite the vogue at the present time.

While the purpose back of the appointment of such groups to make investigations of problems which government executives are forced to pass up because of lack of adequate time, is excellent, there would seem to be a danger in the wholesale creation of such bodies.

History shows that it is much easier to bring a commission, a bureau or special board into existence than to get rid of it when its services are no longer needed.

What assurance is there that upon a completion of their research, the commissions appointed to study child welfare or cancer, for example, will be willing to pass out of the picture and permit the proper agencies now in existence to go on with the work which they started? The charge has been made frequently that the United States government is rapidly becoming unbearably bureaucratic. Fear has been felt by many that the growing tendency for more special boards and commissions is simply pouring fuel onto the fire.

An eastern editorial writer recently made this pointed statement on the same subject:

"If a body of experts can be called together to render a specific service to the government and then retire to private life when the job is done, it may be a decided asset. But if the tendency to hang on after the need for the commission has passed is not checked, there is danger that the system will become a millstone hung around Uncle Sam's neck."

Uncle Sam has enough millstones around his

neck at present, so it would behoove executive officers to make haste slowly in naming civilian groups to investigate problems, serious as they may be, which are within the jurisdiction of governmental agencies already functioning.

Many interesting observations have been made recently by outstanding students of our ever-changing social order.

Ethics Esthetics and Science

Several of them have reached conclusions as to just what is wrong with our way of living and have suggested a number of interesting remedies.

For instance, Dr. Carl Barus, professor of physics at Brown University, says:

"The dilemma of our present civilization is that its advance in ethics and esthetics is not comparable with its advance in science. I am by no means sure that to teach the people at large more science will not do more harm than good. Science lends itself to the arts of war, of aggression, of exploitation, of sabotage, quite as much as to the arts of peace.

"In other words, I think that what we need just now is not an appeal to science to set its house in order; what we need is better civil law, cleaner politics, less obstinate credulity, bigotry and quackery, and a more urgent endeavor to lift the under dog out of his misery and into a life worth living."

The Cincinnati Enquirer in commenting editorially on Dr. Barus' views, believes he "gets near to the heart of the trouble with our social order" and offers the following comments on the same topic:

"There is vast room for improvement in our civil and criminal procedure, room for improvement in the character of our politics and vastly more room for improvement in the correction of the modern tendencies toward intolerance, bigotry and the quackery of professional reform.

"In this day it appears to be the formula of certain groups of the citizenship to compel by law all other groups of citizenship to conform to the specified programs of the special groups here indicated.

"It is equally true, however, that science lends itself to evil, perversions of rational life and living; it has its proper, ennobled place in the scheme of progressive civilization, but it is prone to become master rather than to function as servant.

"Sincerity and honesty should mark every effort toward any sort of progress—in science as in all things else. Have we sincerity in effort toward social development, in educational development, in political functioning? The answer to this question diligently should be sought for by citizens who would care to live in a well-ordered state."

With this same subject in mind, the American Philosophical Society has sent a questionnaire to each of its 436 members, asking the following questions: What today is the world's intellectual need? Is there a loss of perspective by reason of emphasized specialization? Is there a drifting apart of purely scientific and humanistic interests? How can these interests and individualistic learning be coordinated with the purpose of promoting all useful knowledge?

The Ohio State Journal in an editorial discusses this questionnaire and offers the following observations:

"A variety of answers has been supplied. One declares the world's greatest need is leadership, another says the great need is for a means of escape from the tyranny of mediocrity. Another thinks the outstanding danger is found in narrow intellectual education, too much emphasis on research without a broad and comprehensive scholastic preparation, while another feels the world needs most to be freed from pseudo-scientific scholasticism.

"At the close it may be there will be emphasis placed on the need for ethical development in keeping with the scientific and the need for leaders able to interpret the thought of all groups and present it in a constructive manner to the world."

"The much-maligned cost of medical care may take another dizzy upward curve if the doctor prescribes an airplane trip to the hospital", declared a writer in a current magazine in reference to an announcement made by a flying service and ambulance company that airplane will be regularly available to rush patients to New York for emergency treatment and operations, or conversely, to convey patients from New York to any point where there is an adequate flying field.

Adding to the "Cost"

An analogy between the use of airplanes for such purposes and the cost of medical services is inconceivable. Naturally, any physician would not hesitate to recommend the use of an air ambulance in cases of the most critical emergency, but such cases would rarely arise. Certainly no physician would prescribe such extravagance unless the patient insisted upon it.

Here is another foolish luxury which has been added to medical and hospital services, not at the instigation of the medical profession, but because of the demands of extravagant-minded persons.

Life expectancy in the United States is now 58 years and may rise still higher, according to a statement issued by the U. S. Public Health Service, which added that an increase in this figure depended to a large extent on lessening of the mortality rate of heart disease.

The Impending Developments in the Diagnosis and Treatment of Cancer

FRANCIS CARTER WOOD, M.D., New York

SOME years ago a famous English jurist, Lord Moulton, delivered an address before the Authors' Club of London on "Law and Manners." He pointed out that there are three great domains of human action. The first is the domain of positive law, where our actions are prescribed by rules which must be obeyed or severe punishment follows. The second domain is that of free choice, which includes all those aspects of existence in which one may claim and enjoy complete freedom.

Between these two lies a third large and important domain in which there rules neither positive law nor absolute freedom. This he calls the domain of manners. In this domain there is no law which determines our course of action, and yet we feel that we are not free to choose as we would. The Puritan New Englander would call this the region of conscience, but it is broader than that, and Lord Moulton illustrates this obedience to the unenforceable by reference to the Titanic disaster in which the men on the ship first put the women and children into the boats and when there was no more room, the men stayed and went down with the ship. There was no law to compel this action of "women and children first." Lord Moulton discusses all this in a delightful way, showing that the governing principle might be called gentlemanliness, but says that that is too narrow a term and prefers the word Manners used in its broadest sense. He points out the wide scope which this unenforceable influence plays in government, and why it should remain unlimited, and the dangers of transferring to the region of positive law the conditions which had much better be left under the unenforceable.

No law ever enacted could have compelled the men on the Titanic to save the women and children and thereby lose their own lives. He also points out that the habit of thinking that the way to regulate things by passing positive laws is a characteristic of new countries. He does not refer, however, to the Volstead Act, which is an excellent example of the attempt to reform manners by the method of positive law. But he gives other illustrations of the inroads on the great domain of the unenforceable which must always fail. We all realize in this country the present failure of such arbitrary law infringing on human custom. This is not the place to speak, however, of the wisdom or the unwisdom of that situation. The particular reason why I have referred to all this is that the medical profession itself will do well to ponder the situation outlined so well by Lord Moulton.

We physicians have not only the rules of positive law which govern us as well as any other citizen of the country, but we have our special positive laws which control that domain in the behavior of the profession, regulations with which we as physicians have to conform, such as the registrations of births and deaths, notification of cases of communicable disease, and also in general a certain part of the unwritten law which has been embodied in the oath of Hippocrates. In return for these special restrictions there are conferred upon the profession certain privileges not conferred on laymen, and the bestowal of these privileges implies a responsibility far beyond that which applies to the lay members of the population. We have to do a large amount of charity, even to those who are supposed to pay a fee, and as a great profession with a long and honorable record, we are obliged while acting in that domain of the unenforceable, to do many things which interfere with our comforts and rewards of our practice.

Not only have we done all these things in the past, but the future is pregnant with further difficulties, for unless we meet certain problems which are extremely acute, the laity will transfer into the domain of positive law some of our at present voluntary duties, and ultimately make us simply servants of the State with legal limitations far beyond those which are either wise or profitable. Eminent merchants from the pinnacle of millions made in trade, write magazine articles telling the profession that we overcharge the middle class; that we are inefficient; that we should adopt business methods in medicine. Yet these millionaires are the very ones who would protest against the supposed benefits of State medicine. They would protest against the very thing which they recommend for their employes, just as some of the leading executives, though in perfectly legal possession of ample wine-cellars, preach prohibition to their workmen in order that dividends may not be lessened by imperfect work or by accidental injury or death in the dangerous duties in which these employes are engaged. But if we as a profession are to avoid the fate of having our diagnoses, methods of treatment and charges strictly regulated by a code of law, we had better join together, sink our differences, and meet the situation by united action. Attack is the best defense and unless we devise plans to meet the situation, some legislative committee will.

One phase of this subject of which I wish to

Read before the Columbus Academy of Medicine, February 10, 1930.

Director, Institute of Cancer Research, Columbia University.

speak tonight concerns the question of cancer. As you all know, the number of cases of cancer in the United States is rapidly increasing with the increase of population and the increase in the average age of that population. The corrected death rate itself is also increasing slowly owing to the improvement in diagnosis and the willingness of people to acknowledge that they have cancer and to take treatment therefor. This rise is going on as a direct function of the greater intelligence of the medical profession, and yet it is being used against us in the press to prove our inefficiency.

Congress gets excited and with the true American attitude demands that something be done and suggests the wasting of a million dollars in investigating cures for cancer. If they would appropriate $50,000 a year for twenty years that might do something, but to appropriate a million dollars to be spent in investigating that which needs no study is the guarantee that the money will be wasted. Business men, who have never contributed an idea to economics or business administration, complain because, with some three or four hundred thousand dollars a year available in the entire world for cancer research, the cause and cure of cancer is not immediately discovered. Have they found a method of preventing stock market breaks, or of curing poverty? These questions are just about as difficult as the cancer question, and may take centuries of investigation before an even partial answer can be reached.

But so much emotion has been aroused in the public mind by these facts of the increase in cancer and the seriousness of the disease and the ineffectiveness of the medical profession that some reply will have to be made. It is certain that we are ineffective at present for reasons which are not entirely the fault of the physician. We all know how few patients arrive in time, even with those varieties of cancer which can be effectively treated by our present methods. It has been estimated that not over 20 per cent of persons with cancer applying for relief to a large private hospital are operable or capable of effective treatment by X-ray or radium, or by even a combination of surgery, X-ray, or radium, and that of these 20 per cent who are operable, scarcely more than five per cent obtain what we call a cure, that is, five years' freedom from the disease. That is why the death rates from cancer mount steadily.

It does no good to point out that the death rate from cardiac or renal disease, is also rising. A criticism of one aspect of medicine does not help the other. The only question is, are we going to wait until the public tells us what to do and embodies that opinion in a law which may be as ill-judged as the Volstead Act, or are we going to guide public opinion to an intelligent approach to the solution of the problem which will represent the best that the medical profession can do in our present state of knowledge?

The answer to certain phases of this situation, it seems to me, are of interest. In the first place, how are we going to bring the cancer patient to the physician in an early stage of the disease? Secondly, how are we to train the physician to handle that patient in the most efficient manner? I have pointed out in a recent number of the American Journal of Public Health what I consider one important preliminary phase in the handling of the problem, and that is that the medical profession insist upon the official recording of cancer as a notifiable disease. That means more work for the doctor and an increase in money available to State Boards of Health, and that means convincing the public that they will gain something by such an appropriation. The advantage of such notification of cancer would be that we will be in contact with the cancer case at an earlier stage than is now possible.

It is not the fault of the medical profession that patients come late. The medical profession through the American Society for the Control of Cancer has done an immense amount of publicity calling attention to the necessity for early treatment. Not the slightest effect is noticeable in the death rate, and the business of the cancer quack has been considerably increased. The number of people who are intelligent enough to take the message and use it is relatively few. Some of those who have accepted it are out of reach of physicians competent enough to help them. In addition, if the disease could be made notifiable, it would immediately increase our knowledge concerning the natural duration of untreated cases of cancer, because those who refuse treatment or who prefer to have their cancers treated by prayer or quackery would at least be recorded, and we would obtain an important baseline from which to judge the results of our treatment. If, for instance, it could be shown from a large statistical material that the operative treatment of cancer of the breast prolongs the average life two years over the natural duration of the disease not treated, and that X-ray does the same, then it would be obvious that all cases of cancer of the breast should be palliated by X-ray as there is no operative mortality. We have no such figures.

Also compulsory registration of cancer cases would permit a check-up on death certificates, for nowadays a considerable number of certificates are signed heart disease or pneumonia in deference to the family wishes, for the public still considers the word "cancer" an evidence of something to conceal, though it never objects to the diagnosis of tuberculosis or typhoid, both of which are avoidable diseases. Having cancer cases officially recorded would encourage the patient to make use of the best types of treatment available and to thus inhibit the activities of the quack, for the patient would be open to instruction by official health bulletins, which would give

sound information, or even by trained visiting nurses.

Nowadays when the patient is discovered to have cancer, it is astonishing how his or her friends shower the unfortunate individual with clippings from newspapers concerning the latest quackery or how this patient receives pamphlets and appeals from quack institutions to come to them and be cured, but be sure to bring plenty of money. I have seen an innocent old lady with an advanced recurrent carcinoma, of which she had no suspicion, horrified by the reception of a large amount of literature from Indianapolis concerning a sure cure for her trouble. I do not know how her name was obtained, but her remaining days were rendered unhappy by letting her know that she had cancer. Fortunately, her family refused to let her follow the suggestion of the advertisement, though she was very anxious so to do. Notification would also aid the physician in diagnosis and treatment, because the notifying doctor would be instructed as to appropriate treatment and be told where the necessary facilities could be obtained in case he does not know of them.

It is astonishing how ignorant people are of the resources of the profession in a therapeutic way, even in large cities. They will travel around from one third-rate doctor to another carrying innumerable X-ray plates, be subjected to endless ultraviolet light, electrical or salve treatments, and finally turn up with an advanced carcinoma, the existence of which apparently has never been suspected by those through whose hands they have passed. This notification could be made without any difficulty the source of education of the patient and the patient's family, and of the physician. We learn through our mistakes, and mistakes in the diagnosis of cancer are in many cases not due to wilful ignorance but to a lack of knowledge of the symptoms of cancer until it reaches the textbook stage, when of course the patient is beyond any curative therapy.

With the making of the disease notifiable and the recording of the fact that a cancer patient exists in a certain community, the activities of the State Board of Health should be confined wholly to education. I do not believe that such a board should treat the patients, though it may give such a patient information as to where treatment can be obtained.

One of the difficulties which has arisen in connection with the activities of the American Society for the Control of Cancer has been that patients have complained that they have absorbed the advice given, and yet are unable to obtain a careful and painstaking examination which is necessary to either show the presence of a cancer, or to prove its absence. And yet how should a physician in a small town, who sees in the course of his yearly practice three or four cases of carcinoma, be blamed for not being a skillful diagnostician, an expert in reading X-ray plates, a good clinical pathologist, and a few of the other things which are necessary for the diagnosis of an early case of carcinoma of the stomach? Yet one of those unenforceable laws of which I have previously spoken is that the medical profession owes to that patient the best treatment which can be given. The general practitioner of this small town certainly cannot do a gastric resection, if that is feasible. No more can he do a gastroenterostomy, if the lesion is inoperable. The patient must be referred to one who can do both operations well.

One of the unfortunate tendencies of the profession is due to its personal loyalty. We all have a favorite surgeon to whom we refer everything. Whether he is competent to do everything or not is another question. A large acquaintance with surgeons has convinced me that they are an extremely able and conscientious group of men, but that they are omnipotent, I doubt. In my own institution there are men who are highly competent to do one thing, and not so highly competent to do another.

The first thing to do is to break down this notion that cancer is something that everybody can operate on. On the contrary, cancer is a disease of such obscurity, both in nature and in diagnosis, so variable in its natural course, so different in its capacity to extent throughout the tissues, that it requires for its most effective attack not only the knowledge of surgery, but an experience in pathology which is not generally available, and in some borderline instances, the combined judgment of the surgeon and the radiologist to decide whether the patient's life can be prolonged in the greatest comfort and for the longest period by wise palliative surgery or a combination of surgery and radiation.

And may I pause to say that I do not believe the cancer problem is to be solved at one stroke by a serum or gland extract, especially adrenal cortex, but will be met rather by small advances, in various directions, aiding our present methods in one way or another, perhaps with only certain types of cancer at first. The disease is too complex for its sudden and complete mastery by some simple remedy.

But to return to our main subject: It is obvious that in every little town in the United States such a combination of intellectual training and the necessary facilities for expert diagnosis are not available. But cancer is a disease which is rarely of the emergency type. Patients can travel. If they can travel to the Mayos', they can travel 25 or 50 miles to an institution which offers such facilities. I look forward to the time when in the State of Ohio you will have several cancer institutes. I would like to see one here on the University grounds where the most expert diagnosis and treatment could be offered to those suffering from this disease, and what is equally

important, where every physician who sends a patient into the hospital would be cordially welcomed and given full information concerning either the correctness or incorrectness of his opinions, and what he should do, if in error, with the next patient of the same kind.

The French, with their Latin clarity of mind, have realized fully that mere public propaganda is not useful unless the profession meets the results of such propaganda. For otherwise people simply become discouraged and say "What is the use of listening to all of this, if everybody still dies of cancer?" To meet this situation they have established throughout France a series of hospitals of from 50 to 100 beds, partly supported by the state and partly by funds locally raised. These institutes are in university towns where the men who serve can be university professors with all the specialties represented. The place is a teaching institution devoted not only to the cure or alleviation of the cancer patient, but also to the instruction of the physicians of the neighborhood, whether they send in patients or not, so that those who have not had the opportunity to learn the modern methods of diagnosis and treatment can be shown these methods under the best of conditions.

The State of Ohio should take care of its own people. They should not have to travel to Rochester, Minnesota, or to New York City to be treated. Unless it does do so, there is going to be lay criticism of the effectiveness of the profession, and then legislative action. But the time is now ripe to capitalize the great popular interest in cancer, and the little Cancer Clinic which has been running in Columbus for some years, and the effort to establish such cancer clinics in the different hospitals of the city, have been a splendid recognition of the needs of expert handling of the situation.

The physician who operates on one case of cancer a year will never be as successful as the one who operates on 100 of the same type. And so it is necessary if the most effective treatment is to be given to develop a group of surgical specialists, each man fitting himself to handle a particular type of cancer and to see that he gets plenty of material. There happens to be in England a surgeon whose results in operating on cancer of the rectum are extraordinarily good, not only as regards permanent cures, but as regards low primary mortality. I do not wish to be critical, but I doubt that there is a man of such high skill in the State of Ohio. I do know, however, that there is one man in the State of Ohio who took the time to go to London to find out why and how Miles accomplished his results, and this particular man will be, if he is not already, the best surgeon for this kind of trouble that Ohio possesses. And yet how many of you know his name, and how many of the people in Ohio are aware of where he works?

There happens to be in another town a man whose plastic surgery is unsurpassed. He has trained only three pupils. His time of service to humanity is drawing to a close. Some of his personal peculiarities have alienated him from the profession, who have been content to criticize, as we all are so apt to do, without going and seeing first. There are thousands of people who need this man's skill. Only hundreds get it. The profession cannot advertise, according to the rules, advertising being left to the quack. But an institution may legitimately publish the work which it accomplishes, and if that work is made known through appropriate channels, that is all that is necessary.

If you can discourage the indiscriminate reference of cancer cases to any one surgeon, and arrange means by which any person in Ohio can receive the highest grade of diagnosis and treatment, you have done all that the profession can do. When you have made cancer notifiable, and when you have offered at a moderate charge the most efficient treatment to the people of Ohio, you have done everything you can to check the futile legislative attempts to remedy the situation which fortunately still remains in our hands.

All the cancer cases in Ohio can perfectly properly be treated in the three large cities in which there are great medical schools. But public opinion should be so influenced by the medical profession that people will see that the general surgeon, most competent as he is in caring for inflammatory conditions, in handling injuries and in treating the simpler types of superficial cancer and many other phases of general surgery, must surrender some of his patients to the highly trained specialist in order to make effective headway against this most obscure and difficult disease.

But the specialist can only advance in his own line by broad contacts, large experience, close relationship with a staff of wide training, and such a combination can best exist under one roof. If we do not do something of the sort, we will see the people of the State establishing an institution exactly similar to the State institutes for mental disease, with salaried physicians doing the work, and with the complete limitation of scope and opportunity which always occurs to employes in state institutions.

Such limitation is much less important in connection with the insane because of the very slight therapeutic control which is had over mental disease, and the unimportance of the time factor in prognosis. But in a condition like cancer, where every week lost makes a cure more difficult, and where most of the diagnoses are made at too late a stage for effective treatment, the State control of the cancer situation would be a step backwards. Will the medical profession take the step forward, make the personal sacrifices they have always made in other directions, and see that only

by a massed attack can advance in the treatment of cancer be accomplished.

The only practical way out of the situation that I can see is for the medical profession to urge the establishment of three cancer institutes in connection with the three leading medical schools of the state, and when any or all are erected to see that as many as possible of those suffering from cancer be referred to these institutions for treatment. With a population of six millions there should be some 20,000 cancer cases in the state of Ohio. Some 6,000 of these will be early and half of them, or 3,000, curable in our present state of efficiency and treatment. Of the remaining 14,000 many will be advanced cases for whom nothing but palliation can be done, though certain favorable types can still be cured.

Three institutes with 200 beds each could handle a large proportion of these patients. It is not to be expected that every case of cancer can ever be referred to such institutes. At present 20 per cent of persons with cancer die without a diagnosis, and there will always be cases in which no diagnosis can be made, owing to the utter lack of characteristic symptoms.

There will also be a group which must be operated upon by the general surgeon in the general hospital, for they will be discovered during the course of an exploratory operation. A certain number of ovarian, gastro-intestinal, renal and other growths will be found under these circumstances and must be treated at the time, but there are a large number of easily diagnosed tumor patients who should go to the central institute.

Part of the group, such as the carcinomata of the skin, of the uterus, of the base of the tongue and pharyngeal cavity, will be treated by radiation, possibly combined with surgery. Some will so far as we can see remain surgical for a long time to come. This is certainly true of carcinoma of the breast and carcinoma of the gastro-intestinal tract. Others will be treated with a combination of radiation and surgery; others palliated if possible with radiation.

These centers should be prepared to offer such diagnosis and treatment as represents the best skill of the country. This statement implies the judgment of a surgeon, physician, pathologist, and radiologist on the individual case; some day perhaps a pharmacologist and a serologist. The advantage of concentrating patients is of course experience. In return for that priceless opportunity these institutes should offer courses in the diagnosis of tumors, both clinical and pathological, in the treatment of tumors by whatever means may be used, and should also offer opportunities for research. It is essential that a complete follow-up should be had of every patient.

Unfortunately in the United States it is never possible to develop such extraordinary conditions as exist, for instance, in Sweden, where practically every suitable cancer patient is sent to Stockholm for radiation treatment in a single institution, with the result that not only do the patients receive the best possible treatment but the records are extraordinarily complete and a large number of publications have assured a diffusion of the knowledge obtained by the invaluable experience of the physicians at the hospital, which are of benefit to the rest of the world.

It should therefore be obligatory that in the proposed institutes of which I am speaking, the results should be published, whether good or bad, with absolute honesty. If Ohio does this, other states will follow. Massachusetts and New York already have made a good beginning. I have no fear that the medical profession in Ohio will not rise to a high point of unselfishness in referring their patients to such institutes, provided they can be established. Then and only then can the cancer patient have his best chance to live.

That anything that I have outlined will be accomplished in the next twenty years, I very much doubt. Ideas of this sort take root slowly in the popular imagination. We have all witnessed the struggle of our own medical school at the University. It is now, after twenty years of trouble, a school of which we can all be proud, imperfect in some regards, perhaps, but for that very reason all the more worthy of our interest and support.

1145 Amsterdam Ave.

NEW BOOKS

Cancer of the Breast. By William Crawford White, M.D., F.A.C.S., Junior Surgeon to the Roosevelt Hospital; Consulting Surgeon to the New York Nursery and Child's Hospital; Fellow, New York Surgical Society. Harper's Medical Monographs, Harper and Brothers, publishers, 49 East Thirty-third St., New York.

Uterine Tumors. By Charles C. Norris, M.D., Professor of Gynecology and Obstetrics and Director of the Department, University of Pennsylvania; Gynecologist and Obstetrician, Hospital of the University of Pennsylvania, Henry Phipps Institute of the University of Pennsylvania, and Radiological Department of the Philadelphia General Hospital; Gynecologist, Children's Hospital, Philadelphia; Consultant Obstetrician, Philadelphia Maternity Hospital. Harper's Medical Monographs, Harper and Brothers, publishers, 49 East Thirty-third St., New York.

The Treatment of Skin Diseases in Detail. Principles and Practice of Dermatology. Volume III. By Noxon Toomey, M.D., B.A., F.A.C.P., late Instructor in Dermatology, St. Louis University; Major and Surgeon, 138th Infantry, M. N.G.; Dermatologist to the Terminal Railroad; sometime Editor of the Urologic and Cutaneous Review. The Lister Medical Press, St. Louis.

The Normal Diet. By W. D. Sansum, M.S., M.D., F.A.C.P., Director of the Potter Metabolic Clinic, Department of Metabolism, Santa Barbara Cottage, Hospital. Santa Barbara, California. Third Revised Edition. The C. V. Mosby Company, St. Louis.

An Evaluation of Electrocardiography

FRANK C. CLIFFORD, M.D., Toledo

THE electrocardiograph is the latest contribution of modern science to the study of heart disease. Invented in 1903 by Einthoven, it is only now coming into general use. Sir Thomas Lewis, in his latest book, wrote: "'These records (electrocardiograms) have placed the entire question of irregular or disordered mechanism of the human heart upon a rational basis, so giving to the worker the confidence of knowledge; they have influenced prognosis, rendering it more exact; they have clearly shown the lines which therapy should follow. The records constitute the most exact signs of cardiac affections which we possess. Imprinted by the disease itself, they form permanent and unquestionable testimony of events which have occurred. . . . . They demand and impress accuracy of observation."

The purpose of this paper is to describe the use of the electrocardiograph as an aid in the diagnosis of heart disease. To do this it is necessary to briefly review the mechanism of the heart beat.

Heart muscle contracts in response to stimulation arising in the heart. Since each cardiac fiber is endowed with the power of rhythmicity or impulse formation any part of the heart is capable of initiating a contraction. Fortunately this does not occur in the normal heart because all the cardiac cells do not possess this power to the same degree. It is most highly developed in the sino-auricular node and becomes progressively less in the auricles, conduction system and finally least developed in the ventricles.

Because of its greater excitability the node becomes the pacemaker and subdues the lower centers. From the node the impulse spreads to the auricular muscle which responds with a contraction and transmits the impulse to the auriculo-ventricular node. This structure is the beginning of the conduction system of the ventricle. This specialized band of cells continues from the node, as the bundle of His, downwards to the septem. It then divides into right and left bundle branches. These in turn form numerous subdivisions, the Purkinje fibers, which finally end in the ventricular muscle. The impulse from the auricle travels over this pathway to excite the ventricle. "An electrocardiogram depicts this pathway taken by the heart's excitation wave from its origin in the auricle over the conduction system to its final distribution in the ventricular muscle. Thus the conduction system of the heart is the basis of the electrocardiogram."[2] If the impulse arose in the sino-auricular node, was transmitted over an undamaged auricle, thence over an intact conduction system and ended in a ventricle free from myocardial defects, a normal electrocardiogram will be imprinted upon the photographic film. The normal electrocardiogram consists of a series of waves named P Q R S T. These letters have no significance—merely five consecutive letters of the alphabet chosen by Einthoven. The curve formed by auricular activity was assigned the letter P, while Q R S T designate the different forms inscribed during ventricular excitation.

Dissolution of continuity by fibrosis, myocardial degeneration, new growths or inflammation interferes with the progress of the stimulation and changes the outline of the waves. From experimental work on animals and from careful post-mortem examinations of hearts previously studied with the electrocardiograph it is now possible to accurately determine the location of cardiac pathology.

The sino-auricular node is dominated by the vagus. Excessive vagal inhibition can slow the heart to 50 contractions per minute. Removal of vagal control permits free nodal activity capable of exciting 150 contractions per minute. Normal vagal tone results in a rate between 70 and 80.

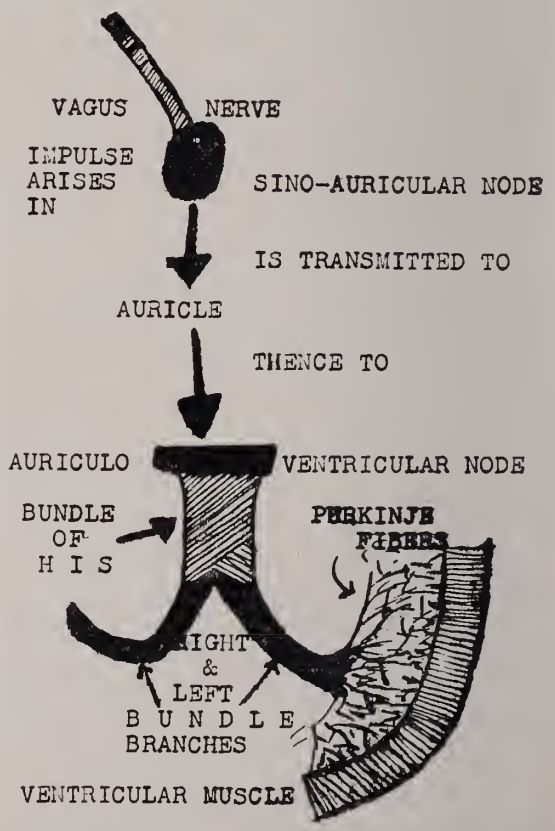


Fig. 1. Pathway of impulse from Pacemaker to the ventricular muscle.

Read before the Medical Section, Ohio State Medical Association, at the 83rd Annual Meeting, Cleveland, May 7-9, 1929.

The power of the vagus increases from infancy to old age. In children, until it becomes stabilized, it is frequently periodic in character, the spacing between beats being unequal.[3] This lagging and quickening is related to respiration; inspiration increasing and expiration decreasing the rate. This, sinus arrhythmia, is of no pathological significance in children. It is often found in records of healthy adult hearts. Phasic variations of vagal origin not related to respiration are frequently discovered, but rarely cause symptoms. Recently a patient examined gave a history of occasional momentary loss of consciousness associated with a slow pulse. His electrocardiogram presented a periodic variation in the length of diastole with a rate of 45. Evidently an unusually long interval between contractions occasionally induced cerebral anemia followed by unconsciousness.

Normal vagal tone governs the heart at rest.[4] Biochemical or physiological demand for an augmented rate decreases its effect. Acceleration may follow exercise, hemorrhage, anemia, hyperthyroidism, drugs, emotion, fever, etc. An electrocardiogram will demonstrate normal rhythm, involvement of the whole organ and short diastole. This is simple sinus tachycardia.

Simple sinus bradycardia is normal in some individuals. More frequently it results from excessive stimulation of the vagus associated with increased intro-cranial tension, digitalis, morphine, typhoid fever, influenza, reflexes from the digestive tract or cardiovascular system, etc. It may be confused with heart block. Differential diagnosis is important since the former is often present in normal hearts while the latter is always associated with heart disease. The electrocardiograph definitely solves the problem. In sinus bradycardia the rate is slow but the mechanism is normal.

Premature contractions or extra systoles are contractions induced by pathological stimulation occurring before the normal beat is due. They are a frequent source of irregularity from childhood to old age, becoming common after middle life. They may arise in the auricle or ventricle of healthy or diseased hearts following digitalis, excitement, mental or physical fatigue, over-indulgence in tobacco, tea, coffee or food, etc. Since myocardial disease frequently excites showers of extra systoles their presence demands diligent search for evidence of cardiac damage.[5] Inability to find other indications of myocardial defects lessens their cardiac significance. The electrocardiograph not only records this arrhythmia but also determines the site of its origin.

In paroxysmal auricular tachycardia a series of regular auricular extrasystoles replaces the pacemaker and drives the heart at a rapid rate. Beginning suddenly these attacks may continue for a few seconds or weeks and end as abruptly as they began. During the paroxysm the rhythm

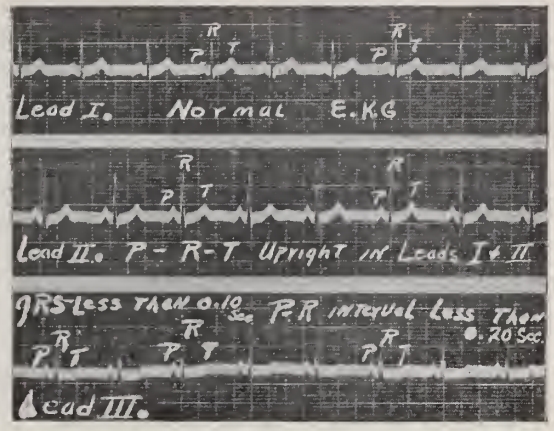
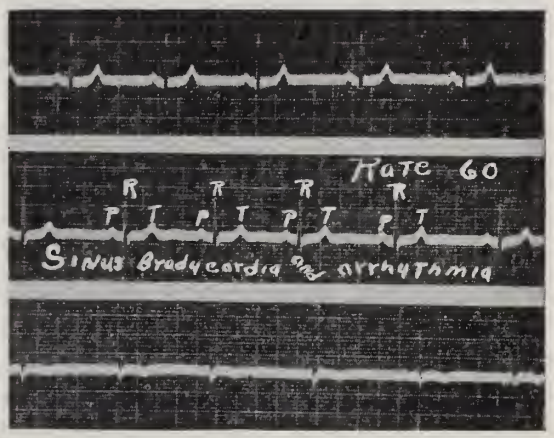


Fig. 2. Normal electrocardiogram. P R T upright in leads 1 and 2. P-R interval less than 0.20 sec. QRS interval less than 0.10 sec.



No. 3. Sinus bradycardia and arrhythmia.

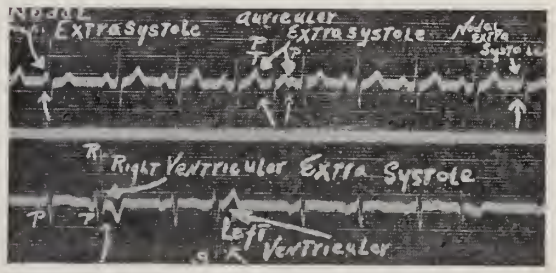


Fig. 4. Three examples of extra systoles. Auricular, Nodal and Ventricular.

is absolutely regular and is unaffected by posture or exercise. The rate is usually between 160 and 200 per minute. An electrocardiographic tracing records normal ventricular complexes in response to every auricular impulse. The auricular wave is abnormal.

In auricular flutter an excitation wave travels over a definite pathway in the auricle. It travels at a rapid rate, between 260 and 360 complete circuits every minute. Each stimulus is followed

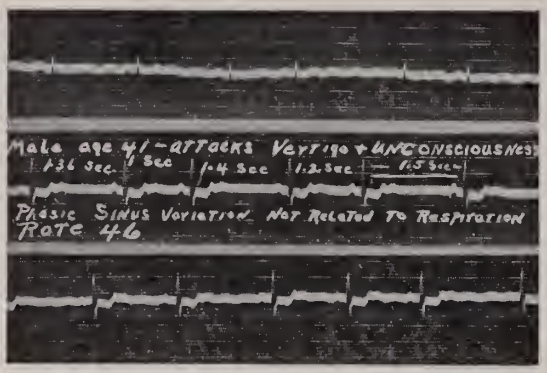


Fig. 5. Phasic sinus variation not related to respiration.

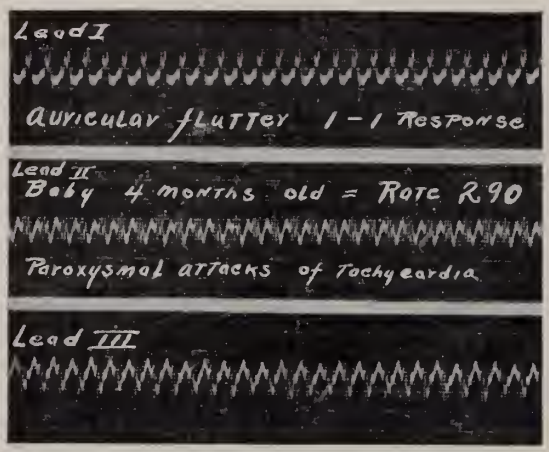


Fig. 6. Auricular Flutter, with ventricle following the auricle beat for beat. The rate is 290 per minute. From an infant four months old. She had paroxysmal attacks of tachycardia for a few weeks preceding this tracing.

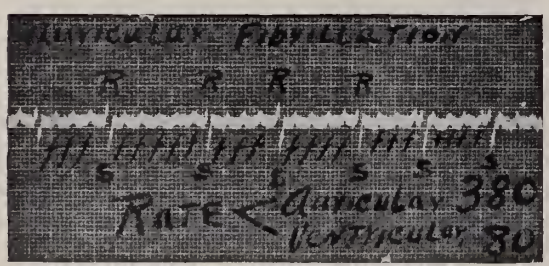


Fig. 7. Auricular Fibrillation. Auricular rate 380, ventricular 80.

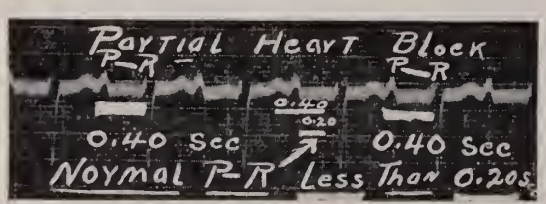


Fig. 8. Delayed auriculo-ventricular conduction. P-R interval is 0.40.

by an auricular contraction, while the ventricle responds to every second, third or fourth. Only rarely does the ventricle follow the auricle, beat for beat. Though generally confined to elderly patients, auricular flutter sometimes occurs in childhood and though rare has been known to exist in infancy. Recently Dr. Lawrence I. Clark sent a four months old baby for a tracing to determine the rhythm of paroxysmal attacks of tachycardia. Examinatnon revealed auricular flutter, with I-I response and a rate of 290. Electrocardiographic assistance is often of great help in diagnosing auricular flutter, especially if marked block is present or if the ventricular action is irregular.

Auricular fibrillation is the most common of all the arrhythmias. It occurs in over 50 per cent of all decompensated hearts. No age is exempt. It adds its extra burden to all types of heart disease. It is frequently present in rheumatic and hypertensive hearts but is rather infrequent in syphilitic failure. Paroxysmal attacks are often the first signs that suggest the possibility of hyperthyroidism in obscure cases. The auricles constantly agitated by rapid (450 per minute) irregular impulses do not contract. The auriculo-ventricular node bombarded by these wild disorderly impulses is unable to transmit more than 180 at most and more often less per minute. The ventricle dependent upon auricular stimulation is therefore grossly irregular in rhythm and rate. An electrocardiogram unerringly depicts this tumultuous condition.

In heart block conductivity is depressed or entirely lost. In sino-auricular block the impulse from the node fails to reach the auricle. This is represented on an electrocardiogram by a pause equal to two normal beats, during which auricle and ventricle remain motionless. Far more important are the abnormalities resulting from pathological changes in the junctional node between auricle and ventricle. Depending upon the amount of damage to this important structure there are various degrees of heart block. Every auricular impulse destined for ventricular excitation is delayed in passing through the auriculo-ventricular node. The normal impulse travels from the pacemaker, over the auricle and through the node in less than 0.20 second. Infectious or toxic changes in the node may delay it up to 0.30 or 0.40 second. This is partial heart block, and frequently is the only sign of cardiac involvement in rheumatic fever and diphtheria.[6] After each impulse the node requires a rest before it can transmit another.

If this refractory period becomes prolonged the regular, rhythmic auricular impulses may reach the node during this non-conductive time and fail to pass. Depending upon the amount of nodal disease, only an occasional, or every second, third or fourth impulse will be blocked. When this

occurs the ventricle does not contract and a long pause is noted at the radial. Increased depression of conductivity may completely block all auricular stimulation. The ventricle deprived of its normal stimulus becomes its own pacemaker. It requires some time for the new center to prepare for activity, in the interval the ventricle remains in diastole and cerebral anaemia ensues. This is manifested by vertigo, fainting and loss of consciousness.

Recently an electrocardiogram showing normal conduction was just completed when the patient complained of dimness of vision and vertigo. He became unconscious and had convulsions. In a few moments he was conscious and apparently normal. A tracing made immediately showed

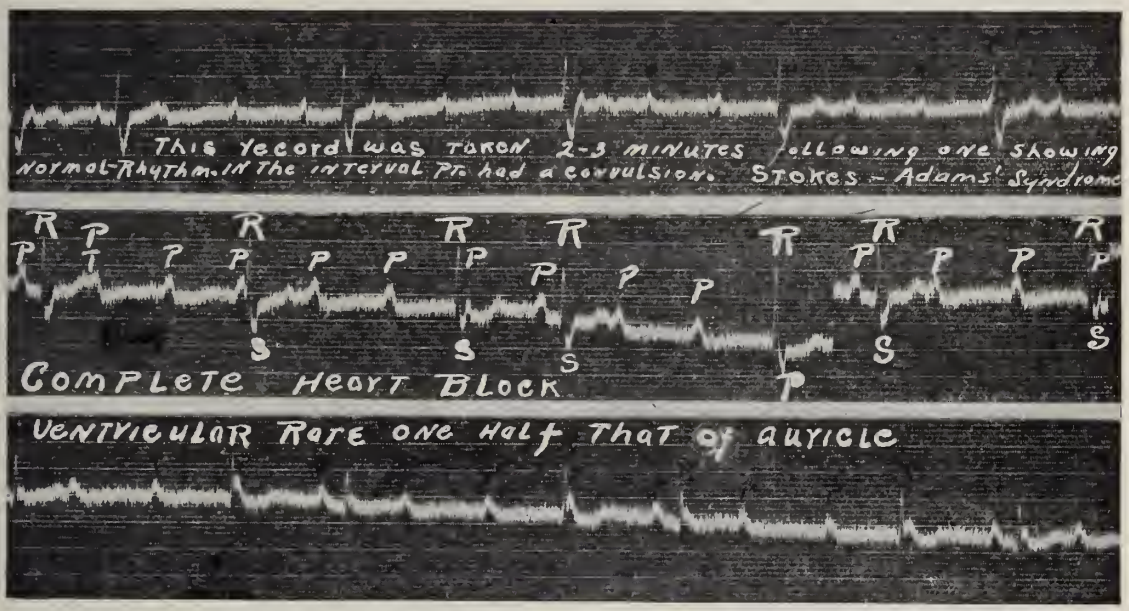


Fig. 9. Complete heart block. This picture was taken a few minutes after one showing normal rhythm. In the interval patient had convulsions. Ventricular rate 42, auricular 93.

complete dissociation between auricle and ventricle, the auricular rate was 93 and the ventricular 42. The electrocardiogram gives reliable and important information concerning cardiac conductivity. Since heart block, with few exceptions is always indicative of myocardial injury, accurate diagnosis is of great assistance for prognosis and treatment.

From an electrocardiogram it is often possible to determine preponderance of one ventricle over the other. The right side is expected to be larger than the left in mitral stenosis and in all conditions increasing the pressure within the pulmonary artery. The left side exceeds the normal ratio in arterial hypertension and aortic regurgitation. These electrocardiographic findings are often valuable in congenital malformations and occasionally help to settle the origin of precordial murmurs.

Since heart failure is myocardial failure, any procedure that will determine the condition of the myocardium is valuable. Functional or organic disease of the heart muscle produces characteristic abnormalities in the electrocardiographic tracing. After years of clinical observation certain curves have been found to be of diagnostic value. Willius[7] and other investigators have proved that inversion of T 1 and T 2, in hearts free from digitalis effect, is good evidence of myocardial injury. The normal QRS is smooth in outline, has a quick upstroke and rapid fall, the whole movement being completed in less than 0.10 second. Notching or widening of this complex indicates pathological interference in the ventricular conduction system. This also means myocardial damage. Pardee[8] draws attention to a peculiar form of inverted T. It is called the coronary T because post mortem examinations have demonstrated close association of this wave and coronary disease. Evidence of any of these, the effects of drugs and certain physical conditions being excluded, may safely be accepted as trustworthy proof of myocardial disease.

SUMMARY

(a) The electrocardiograph determines the type and origin of the arrythmias. It is true that the trained ear and finger of the experienced clinician can diagnose the vast majority of these irregularities. To these men the electrocardiograph offers a permanent record of the condition. To those of us, lacking an acute sense of rhythm, the electrocardiograph will take its place in disorders of the heart beat. Frequently examinations of such hearts checked by the electrocardiograph will teach one to recognize and classify abnormal rhythm without instrumental aid. Occasionally

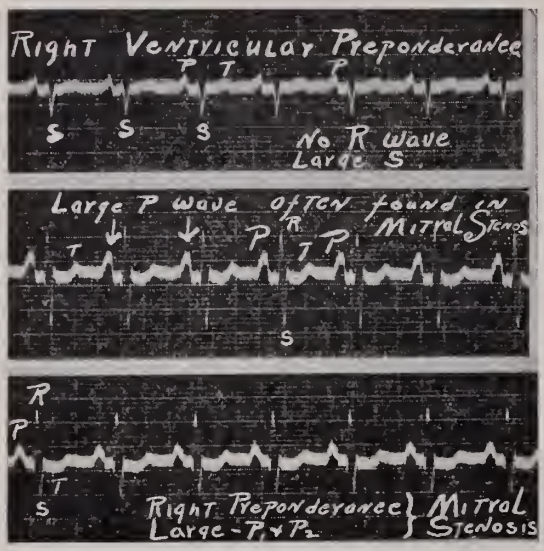


Fig. 10. Right axis deviation and large P 2. This picture may accompany Mitral Stenosis.

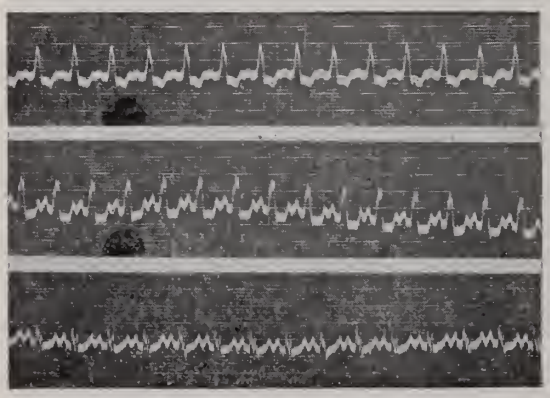


Fig. 11. QRS wide, notched, interval 0.12 sec. T 1 inverted. Evidence of myocardial damage.

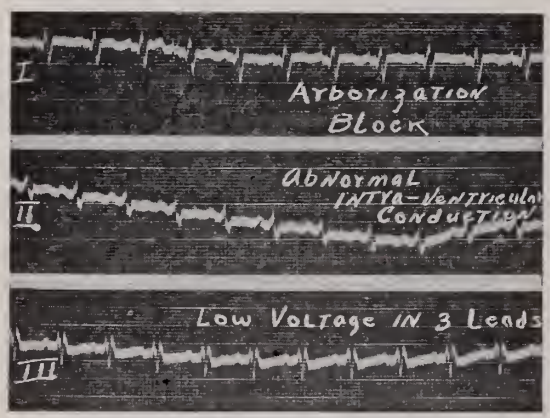


Fig. 12. Arborization block. Small waves in all three leads. QRS wide and notched. (Standardization: One MV equals 2 cm.)

even the expert must depend upon an electrocardiogram to definitely diagnose some irregularities.

(b) Electrocardiographic information of axis deviation may simplify the diagnosis of some murmurs.

(c) Electrocardiographic evidence of partial, bundle branch or arborization block, inversion of T 1 and T 2 or abnormal intraventricular conduction may be accepted as proof of myocardial damage. Dr. Carl J. Wiggers of Western Reserve University writes,[9] "One of the most important services of the electrocardiogram consists in its ability to supply evidence as to the condition of the heart muscle. . . . . If, in cases of valvular disturbance, the electrocardiogram shows a normal conduction time if the chambers react in normal sequence and the waves are of relatively normal amplitude, the cardiac muscle may be considered as practically uninjured and the prognosis is good. If, on the other hand, the conduction time is lengthened, the impulses blocked and the heart beat irregular, the efficiency of the circulation is impaired and the probability of an efficient compensation is less."

CONCLUSION

1. No examination of a diseased heart is complete without an electrocardiogram.

2. Although the electrocardiograph is an important method for cardiac investigation it will never replace a good history and thorough physical examination.

3. An electrocardiogram is trustworthy only when considered in conjunction with the clinical record.

914 NAVARRE ROAD.

REFERENCES

1. Lewis, Thomas: The Mechanism and Graphic Registration of the Heart Beat, London, Shaw and Sons. 1925. p. VI.
2. Smith, Calvin: Heart Records. Their Interpretation and Preparation, Philadelphia, F. A. Davis. 1923. p. 7.
3. Wiggers, Carl J.: Circulation in Health and Disease, Philadelphia, Lea and Febiger. 1923. p. 453.
4. McDowall, Robert J. S.: Clinical Physiology, New York, D. Appleton Co. 1927. p. 90.
5. Lewis, Thomas: Clinical Disorders of the Heart Beat, London, Shaw. 1925. p. 55.
6. Pardee, Harold E. B.: Clinical Aspects of the Electrocardiogram, New York, Paul B. Hoeber. 1928. p. 146.
7. Willius, Frederick A.: Clinical Electrocardiograms, Philadelphia, W. B. Saunders Co. 1929. p. 171.
8. Pardee: Clinical Aspects of the Electrocardiogram. p. 85.
9. Wiggers: Circulation in Health and Disease. p. 295.

NEW BOOKS

Insomnia; How to Combat It. By Joseph Collins, M.D., Consulting Neurologist, New York City; formerly President of the New York Neurological Society; Member of the New York Academy of Medicine. D. Appleton and Company, New York.

The Baby's First Two Years. By Richard M. Smith, A.B., M.D., Sc. D., Assistant Professor of Child Hygiene, Harvard Medical School, and School of Public Health, Associate Physician, Children's Hospital, Visiting Physician, Infant's Hospital, Boston. With Illustrations. New and Revised edition. Houghton Mifflin Company, Boston and New York.

Disease and the Man. By George Draper, M.D., Associate Professor of Clinical Medicine, Columbia University. The Macmillan Company, New York.

X-Ray and Radium in the Treatment of Uterine Fibromyoma and Benign Menorrhagia

M. A. THOMAS, M.D., Cleveland

INCREASING PREFERENCE FOR RADIATION THERAPY

X-RAY and radium have been used in the treatment of uterine fibromyoma and benign menorrhagia for approximately twenty-five years. The results which have been obtained during this time have been so satisfactory that this type of treatment is more and more being given preference over surgery. Eminent gynecologists such as Clark, Norris, and Miller have estimated that radiation therapy is indicated in twenty-five to thirty per cent of their cases. Others, who specialize more in the use of *X*-ray and radium give estimates up to eighty per cent. Bèclére, who treated seven hundred cases by the use of *X*-ray with failure in only one per cent, states that in his opinion "roentgenotherapy is contraindicated only in cases in which for some urgent reason, surgical intervention becomes absolutely necessary". When we realize that only a comparatively few years ago radiation therapy was used with great skepticism and then only in those cases in which surgery was definitely contraindicated, the great advance that this type of treatment has made can readily be appreciated.

The preference of radiation therapy over surgery is largely due to the fact that with this type of treatment, there are neither the dangers nor the inconveniences which are necessarily a part of surgery. The mortality rate for hysterectomy is generally estimated to be about two per cent for the more experienced and skilled surgeons and certainly in the hands of the occasional operator this must be considerably higher. Of course, it is unfair to make a comparison on a mortality basis alone since many of the deaths occur in rather hopeless cases in which the operation is performed only as a last resort, whereas radiation therapy is generally used when the need is not so urgent. However, fatalities occur with sufficient frequency in cases which are considered to be excellent surgical risks that this possibility should always be kept in mind when advising the patient as to the best course to pursue. Especially is this true when there are children and relatives who are dependent on the patient for care and support and who would be seriously affected by such an accident. Radiation therapy is also preferred on account of the short period of hospitalization and convalescence. With *X*-ray treatment there is, of course, no time spent in the hospital nor is there any period during which the patient is incapacitated, and with radium treatment this time is reduced to the minimum.

INDICATIONS AND CONTRAINDICATIONS: IMPORTANCE OF DEFINITE DIAGNOSIS

In our effort to choose the course of least resistance for the patient we should not lose sight of the fact that there are certain very essential contraindications to radiation therapy which must be considered. Of these the most important is the necessity of making a positive diagnosis before instituting treatment. If it is impossible to rule out the presence of malignancy, ovarian cyst, adnexal disease, pregnancy, etc., without an operation, then it would be most ill-advised to use irradiation therapy. Fortunately in most cases the diagnosis is quite definite, but occasionally it is necessary to open the abdomen or to curette before arriving at a positive opinion. In all cases of bleeding there is, of course, the possibility that a malignancy is present and for this reason many radiologists insist that a curettage be performed routinely in these cases. It is our opinion, however, that very frequently the bleeding is so obviously due to a benign cause that to perform a curettage routinely would put unnecessary risk and discomfort to a great many patients. Bleeding after menopause, bleeding between periods, especially after some slight exertion, watery discharge, especially blood tinged and persistence or recurrence of bleeding after irradiation are very suggestive of malignancy. A thorough history and a careful analysis of the symptoms are extremely important and then if there still remains a reasonable doubt as to the diagnosis a diagnostic curettage should be performed.

LOCATION OF TUMOR

Another contraindication to radiation therapy is the presence of pedunculated fibroids. The submucous pedunculated fibroids may give rise to severe bleeding and are not infrequently infected and ulcerated and should be removed surgically. Subserous pedunculated fibroids may cause obstruction or become strangulated and gangrenous and unless removed will continue to be a potential source of danger. Surgery is also indicated if there are other pathological conditions present in the abdomen which require surgical intervention. Also tumors which are rapidly growing or are undergoing degenerative changes should as a rule be removed surgically.

SIZE OF TUMOR

The size of the tumor is frequently given as a contraindication to treatment by irradiation since

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it is claimed that tumors over fifteen centimeters in diameter do not disappear under the influence of the rays. We quite agree that the best results are obtained in small tumors, but since exceptional results may also be obtained in large tumors we do not believe that size itself is a definite contraindication to radiation.

Kelly states that in reviewing his tumors larger than a five month pregnancy, he finds that more than sixty per cent disappear completely. Corscaden reports that, "In one hundred and five cases where the mass was large enough to measure there was reduction in all but one and this patient had only moderate doses which made the menstruation become normal. The most rapid reduction was in a mass twenty centimeters in diameter which could not be made out after six months. The slowest was in one fifteen centimeters in diameter which was reduced to eight centimeters in three years and has remained so through four years more."

We have been called upon to treat many cases in which the tumor was over fifteen centimeters in diameter and it has been our experience that with few exceptions the tumor will decrease to such an extent that the symptoms are no longer objectionable.

AGE OF PATIENT

The age of the patient is a very important factor in deciding the type of treatment which is advisable. If the patient is young and it is desirable to preserve the ovarian function, it is necessary to resort to myomectomy or hysterectomy, since the dosage of *X*-ray or radium which would be given in the treatment of the fibroid would be such that a permanent menopause would result. However, if the patient is over thirty-eight there is no valid reason for objection to the induction of an artificial menopause since this induced physiological change is more rapid and as a rule no more severe than a natural menopause.

Our dread of the artificial menopause has come to us from the disastrous results which followed the wholesale removal of ovaries a few decades ago. However, there is no comparison between the two in the experience of those who have observed both types of menopause. This may be explained by the fact that this operation was so frequently performed in patients with an unstable nervous equilibrium and their symptoms were greatly aggravated by the changes associated with the menopause. And it is recognized today that radiation is not advisable in cases of this type because of the danger of increasing the nervous symptoms.

LATENT PELVIC INFLAMMATORY DISEASE

Another frequently stated objection to radiation therapy is the danger of lighting up an old inflammatory disease of the pelvis. It is quite true that this may occur with radium treatment, but it has not been our experience nor have we ever seen recorded an instance when this has occurred with *X*-ray treatment. In fact it is generally recognized that *X*-rays are frequently very beneficial in the treatment of certain infections so the presence of a low grade inflammatory condition would be an indication rather than a contraindication to its use. We are, of course, not advocating the use of radiation where there is active infection present, nor where there is definite pathology in the adnexa which requires surgery. We have, however, used *X*-ray with marked success in the treatment of large, rapidly growing fibroids in which surgery was definitely contraindicated because of the presence of active infection. In cases of this type *X*-ray can be given slowly in divided doses without causing the slightest reaction.

CONSTITUTIONAL DISEASE AND SEVERE ANEMIAS

There are certain cases in which radiation therapy is indicated regardless of the size of the tumor, age of the patient or other contraindications. In this group would be placed cases in which, owing to the presence of constitutional disease, the risk from surgical procedure is too great. We should also include those patients who have been anemic as a result of long continued bleeding. Erskine states that "any patient whose hemoglobin is less than sixty-five per cent should be treated with *X*-rays no matter how large her tumor or what complications may be present."

The operative mortality is so high in anemic patients that hysterectomy is not justified, especially since we have so efficient a method of controlling hemorrhage as radiation. The presence of a so-called fibroid heart is also of great importance since, according to Miller, "deaths from circulatory disturbance occur approximately twenty-five times more frequently in fibroid operations than in the general run of surgical cases."

BLEEDING DURING ADOLESCENCE

Radiation therapy has been of great help in the treatment of benign menorrhagias which occur during adolescence. On account of the possibility of producing an artificial menopause, radiation should only be used as a last resort after medicinal, and glandular therapy and curettments have failed. However, if the treatments are given very carefully, erring on the side of safety, the danger of producing permanent amenorrhea is quite remote. C. F. Burnham states that he has never seen this occur when the dosage of radium was limited to 700 mgh.

The results obtained by repeated small doses of *X*-ray are equally satisfactory and many writers prefer this type of treatment because of the ease with which the treatments can be given and repeated, and also because of the possibility that even small doses of radium may cause dystocia and interfere with subsequent pregnancies. There is no question but that radiation therapy is far superior to hysterectomy since by this method

menstruation may return to normal and there remains still the possibility of subsequent pregnancies.

BLEEDING AT MENOPAUSE

A very important indication for radiation therapy is in the treatment of the menorrhagias of menopause. Perfect results can be obtained in almost one hundred per cent of the cases and these patients who have been suffering for months and even years are most grateful for the relief which they get in a few months or less. As these patients are in the cancer age special care must be taken to rule out the presence of malignancy.

CHOICE BETWEEN X-RAY AND RADIUM

The choice between *X*-ray and radium is generally dependent on circumstances and personal preference. Radium is naturally more popular with the surgeons since they can give the treatments themselves, whereas, *X*-ray therapy is a highly technical procedure which requires special training. There is no essential difference between *X*-ray and radium as far as effect goes since equally good results can be obtained with either, providing sufficient dosage is given.

In our experience with both types of treatment we have found that there is far less reaction and of course less inconvenience for the patient with *X*-ray than with radium. In fact, with the *X*-ray treatments given in divided doses, the only discomforts noted are occasionally slight malaise and nausea which disappear in a day or so.

With radium treatments, on the other hand, the patient is hospitalized and is generally given an anesthetic, and not infrequently there is a period of a month or so following the treatment during which the patient may complain of symptoms referable to the pelvis, such as backache, dragging pains, slight fever, etc. This may be due in some cases to a stirring up of some latent pelvic infection which, as we stated before, does not occur with *X*-ray treatment; or it may be due to reaction which follows the radium treatment.

We know that when a large dose of radium is given, a localized area of reaction develops in which there is ulceration and, since the field is not sterile, more or less infection may be present. The surrounding tissues and the lymph glands also become involved in this inflammatory process. It is readily seen that there may be rather marked symptoms of pelvic inflammation when this reaction is at its height. These symptoms are not constant nor are they ordinarily very severe, but occasionally patients will complain rather bitterly about them especially when they have been informed that they would not be incapacitated by the treatments. This is quite important when dealing with women who have important positions and can ill afford the time lost from work. With *X*-ray treatments we do not hesitate to promise that their work will not be interfered with except for the time that they come to the office for treatment.

X-ray is to be preferred in the treatment of large tumors since by this method a more homogeneous radiation can be delivered throughout the tumor mass. This is especially true when the uterine canal is eccentrically placed. A more rapid and probably a more certain result would be obtained if both types of treatment were combined to obtain a cross-fire effect. *X*-ray would also be indicated in those cases in which it is desirable to give the treatment slowly using small repeated doses so as to minimize the possibility of any reaction.

As a general rule we advise radium in all cases in which a curettage is indicated. This is especially true if malignancy is suspected since the radium treatment would minimize as far as possible the danger from dissemination if a cancerous growth is present. We also prefer radium when a more rapid action is desired as in cases of severe bleeding.

RESULTS

The rapidity with which the fibroid decreases in size is quite variable. Some tumors respond quite rapidly, but as a rule the change is a slow, gradual one which continues over a period of a year or more. The number of periods following the treatment also varies. When *X*-ray is used the first period is changed but slightly, the second is definitely decreased and the third period, if present at all, is very scant. When radium is used there is seldom more than one period following treatment.

Whenever possible we prefer to start treatment immediately after a period is over, since giving a treatment just before a period may increase the amount of bleeding during that time. The hot-flashes which come with the menopause are always unpleasant, but only occasionally are they so severe as to be objectionable. Change in the weight is quite variable and is probably to a large extent dependent on the habits of the patient. The nervous symptoms, if present, are generally improved, but occasionally when there is a tendency toward nervous instability these symptoms may be exaggerated. Secondary sexual characteristics are unchanged, nor is there evidence of ageing as a result of the treatments.

As a whole, it may be stated that the general health of the patient is improved and it is a rather constant observation that when these patients are questioned as to this, they will state that they have not felt so well in years.

CONCLUSIONS

1. Experience based on the treatment of thousands of cases over a period of twenty-five years has shown that radiation therapy is a safe and efficient method of treating uterine fibromyomata and benign menorrhagias.

2. Uniformly satisfactory results will be obtained in the treatment of uncomplicated, non-pedunculated fibroids, fifteen centimeters or less in size, in patients over thirty-eight years of age.

However, neither age of the patient, nor size of the tumor nor the presence of low-grade inflammation should be considered as positive contraindications.

3. Radiation therapy is to be preferred whenever there is more than the usual surgical risk as the result of anemia, heart disease, nephritis, diabetes and other constitutional disease.

4. Radiation therapy is indicated in all cases of fibrosis uteri or in those cases of essential uterine hemorrhages.

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Physiology and Surgery of the Biliary Tract

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IN the light of progressive research we more and more see in the human body a chemical machine. Biologists tell us that our ultimate ancestors were unicellular organisms. Perhaps, finding it a bit difficult, then as now, to secure and assimilate food, they joined together for the common good; hence the beginning of multicellular organisms. Specialization of function with interdependence among individual cells necessarily followed. Now, in the human body, most cells have but a single function to perform, though unlike their sturdy ancestors, they are unable to live alone and must be cared for by other cells of the body.

The reversion of specialized cells to a cell prototype is suggested by the behavior of the cells in malignancy. In an interesting article by Andrews, Thomas and Schlegel, the liver is looked upon as a great mass of undifferentiated cells which have withstood the tendency to specialization and are primarily concerned in the fundamental physiological process, the assimilation of nutrition. We may, accordingly, look upon the liver as the chief chemist in directing the vital processes which have to do with the sustenance of life in all other cells of the body. The importance of the liver may be assumed from the fact that when it is removed from the body death promptly ensues. It is without doubt our busiest organ, with functions most manifold.

The most important function of the liver, from a surgical standpoint, has to do with the manufacture and secretion of bile. This fluid is collaborated by the liver and conducted into the duodenum at an average rate of an ounce an hour. In the course of twenty-four hours about a pint and a half is emptied into the bowel to aid in the digestion of food. In man, bile is conducted from the liver to the duodenum by a mechanism consisting of a system of ducts complemented by an auxiliary viscus, the gall bladder. This organ is present in man and mouse, though absent in the elephant and rat. All reptiles, most fish and many birds have gall bladders. The presence or absence of such a viscus apparently has no bearing upon health, habits or longevity. But it does not follow that an animal normally possessed of a gall bladder can get along just as well without one.

The function of this organ seems to be the concentration and evacuation of bile at a time most favorable for digestion. During the fasting periods the gall bladder fills. After meals its contents are evacuated into the duodenum. The precise mechanism by which the gall bladder is thus periodically emptied has been recently sought by a large number of investigators. The various experiments upon small animals, seeking a solution to this problem, have given rise to a voluminous literature during the past two or three years.

It was formerly taught that the gall bladder was emptied by a combination of extrinsic forces; that the muscular tunic of the viscus was impotent and had little, if anything, to do with the evacuation of its contents. A great variety of ingenious experiments have conclusively proved that the gall bladder empties itself by the contraction of its tunica muscularis. In other words, it qualifies as a self-emptying viscus, in a manner very similar to the urinary bladder.

The organ fills as a result of back pressure instituted by the action of the sphincter of Oddi in closing the outlet of the common bile duct at its opening into the duodenum at the Ampulla of Vater. When this muscle is divided, subsequent filling of the gall bladder does not usually occur.

The exact manner by which the muscular tunic of the viscus is stimulated to contract, following the ingestion of food, has not yet been definitely determined. Ivy and Oldberg have stimulated the gall bladder to activity by the intravenous injection of a purified secretin. They are of the opinion that a specific hormone, to which they have given the name "cholecystokinin", is the activating agent.

The discovery was made, in 1923, that the normal gall bladder always empties itself promptly after the ingestion of a meal consisting of egg yolk and cream. Just why a meal consisting largely of fats activates the gall bladder to empty more promptly and completely than one of carbohydrates has not been determined. When a meal of barium sulphate, or other indigestible material, is taken into the stomach the viscus does not empty at all. But when, at the meal next following, we administer egg yolk and cream the organ promptly empties itself.

Regarding the efficacy of draining the gall

bladder by the instillation of a solution of Epsom salts into the duodenum; Whitaker of Boston remarks as follows: "The direct application of magnesium sulphate undoubtedly relaxes the sphincter, but it produces only a very slight emptying of the gall bladder, possibly because of the elastic recoil of the distended viscus. Complete emptying comes only after taking food. Incidentally, these observations make it evident that nonsurgical biliary drainage, by the intraduodenal injection of magnesium sulphate, as a therapeutic measure in disease of the gall bladder, is a useless procedure."

Believing, however, that biliary stasis is a factor in the causation of gall stones, Whitaker would combat this condition by a proper dietetic habit. "This," he remarks, "should include, not frequent feeding, but taking meals at long intervals which are fairly rich in fat. A person should be really hungry when he eats, which signifies that the tone of his alimentary canal and gall bladder is high. When the meal is eaten under these conditions the digestive organs attack it vigorously and the gall bladder empties itself in a few hours. The meal is rapidly disposed of and the gall bladder rapidly refills with bile. Thus the gall bladder is subjected to two or three good flushing daily, allowing little chance for precipitation or long continued irritation by foreign particles."

GALL STONES

After numerous experiments on small animals, Whitaker attributes to biliary stasis a leading role in the production of gall stones. Copher and Illingworth were unable to produce cholelithiasis experimentally in animals by stasis alone or by stasis combined with biliary infection, even in the presence of foreign bodies. Moynihan said, many years ago, that "every gall stone is a tombstone erected to the memory of the germs that lie dead within it." The concensus of opinion among clinicians of large experience is that gall stones are caused primarily by an infection within the gall bladder wall; in other words, intramural rather than biliary infection.

The microorganisms causing cholecystitis are probably most commonly carried to the viscus by way of the blood stream. In chronic cholecystitis the bile is frequently sterile. When, therefore, we perform cholecystostomy, we may leave behind an infected gall bladder, even though the specimen of bile withdrawn for examination is found to be sterile.

Judd gives a detailed report of a bacteriological study of one hundred cases of cholecystitis. Gall stones were present in fifty of the cases. The gall badder walls, the bile and the gall stones were immediately sent to the laboratory for culture. In five out of fifty—ten per cent of the cases—a positive culture was obtained from the gall stones. The bile was bacteriologically positive in seven per cent, and the tissue of the gall bladder wall in twenty-nine per cent of the cases. Only five out of twenty-two cases of "strawberry gall bladder" gave positive cultures. Perhaps in some of the negative cases, bacteria, like the Mound Builders, had been present, left their mark and departed. It seems probable, however, that agencies other than stasis and infection are causative factors in many of the cases of cholecystitis, with or without gall stones, and that a solution of this problem must eventually be found in the field of biochemistry.

In this connection Mann has demonstrated that experimental cholecystitis can be readily produced by the intravenous injection of Dakin's solution. The gall bladder wall was the first tissue affected in his experiments. It is therefore probable that the gall bladder is particularly vulnerable to both chemical and bacterial invasion.

Cholecystography has been an invaluable aid in the diagnosis of gall bladder disease. A careful history and physical examination, supplemented by cholecystography, usually suffice to make a correct diagnosis.

The treatment of cholecystitis and cholelithiasis in the presence of well defined symptoms is essentially surgical. The ideal treatment to be sought in the future must be prophylactic. If some means may be found to prevent infection, or biochemical imbalance of the biliary tract, then the panacea will have been realized. Then cholecystectomies, like tallyhoes, will be reminiscent of bygone days.

In our operations for gall bladder disease, cholecystectomy is performed in more than eighty per cent of the cases. Animal experiments indicate that the gall bladder which has been drained ceases to function thereafter. On a number of occasions, when I have opened the upper abdomen to remove a gall bladder which had been previously drained, I have found the viscus so attached or imbedded in adhesions as to preclude normal function. Cholecystography also confirms this view.

In the presence of jaundice from obstruction of the common duct, due to calculi or pancreatitis, cholecystostomy is to be preferred. Even in the absence of jaundice, when calculi are present in the common duct, it is safer to remove the stones by choledochotomy and drain the gall bladder. Occasionally the gall bladder may be useful at a later date to remedy biliary obstruction by its anastomosis with the stomach or duodenum.

In empyema of the gall bladder, when the patient is in good condition, I much prefer cholecystectomy. When, however, the patient's condition is poor, and especially when the distended viscus is grossly adherent, then cholecystostomy under spinal or local anesthesia offers the best chance of recovery.

In cases of cholecystitis with severe toxemia and high fever, unaccompanied by jaundice, I

wish to emphasize the desirability of postponing any operative interference until the subsidence of these symptoms.

Surgery is most satisfactory when a cholecystectomy removes all or most of the pathology. When hepatitis and cholangitis are also present, drainage of the biliary tract to the outside, for a period of weeks or months, assists nature in effecting a cure. A dilatation of the bile ducts indicates obstruction. Even in the absence of jaundice a careful exploration of the common and hepatic ducts should be made. Resident calculi may be found and removed, and thus obviate the necessity of a second operation when adhesions always complicate.

Sometimes gall stone colic appears in the wake of a cholecystectomy even though the ducts have been carefully explored. When the common and hepatic ducts are greatly dilated, the intrahepatic ducts are similarly affected and frequently give residence to calculi which may descend and produce symptoms at any time. In Vienna, a number of years ago, I witnessed an autopsy which revealed the presence of nearly a hundred calculi resident in the intrahepatic ducts.

Surgery in the presence of jaundice has been made safer through a better understanding of the beneficial effect of the administration of calcium. I have seen the blood coagulation time reduced from eighteen to five and one-half minutes in twenty-four hours by the intravenous administration of calcium chloride. Glucose administered intravenously is also efficacious.

The prevention of hemorrhage in jaundiced patients requiring surgical intervention has contributed materially in reducing the general mortality in surgery of the gall bladder from ten to about three per cent in twenty-five years.

Methods of procedure in surgery of the biliary tract vary with the individual preference of the operator. It is not within the scope of this paper to discuss technique in a comprehensive manner; but there are a few points which I wish to emphasize.

It is important to have the kidney lift in just the proper position, neither too high nor too low. This makes for better elevation and exposure. I prefer the Robson incision, beginning above at the substernal notch and extending down far enough to provide ample room. In cholecystectomy, when the gall bladder is greatly distended or the ampulla sacculated and so situated as to prevent satisfactory isolation of the cystic duct, then it is desirable to proceed from above downward. Usually, however, the cystic duct can be readily and definitely isolated and the operation completed from below upward. When there is even the slightest doubt regarding the identification of the cystic duct a division of the free border of the gastro-hepatic omentum, with open exposure of the bile ducts, is the method of choice. Now we will not damage important structures because we can see them.

As mentioned previously, when cholangitis is apparent, biliary drainage to the outside is indicated. In doubtful cases, following the lead of W. J. Mayo, I ligate the stump of the cystic duct rather loosely, leaving the ends of the ligature long enough to protrude through the wound. This ligature can then be released by suitable traction to establish biliary drainage if required during convalescence.

When cholecystostomy is the operation of choice, because of a bad surgical risk in an elderly patient, I prefer the old technique of Ochsner; namely, to suture the gall bladder to the peritoneum in the line of incision. It is then a simple matter to reopen the gall bladder under a local anesthetic, if required, for subsequent drainage.

To secure the best results in our critical cases of surgery of the biliary tract, the assistance of the internist is invaluable in both pre- and post-operative care.

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Institutional Physiotherapy as an Adjunct in the Treatment of Hypertension*

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INTRODUCTION

ADJUVANTS to the treatment of arterial hypertension whether of the primary (or essential) or secondary type, are always appreciated by those members of the medical profession who are called upon to treat patients suffering with the disease.

It is realized that the manner of treatment which has persisted through decades is valuable in accomplishing much improvement in the condition of these patients. The recognized measures include the regulation of the patient's life as regards exercise, rest, recreation, diet, elimination through the kidneys, intestines and skin by programs carried out in the home; the improvement of the mental outlook by suggestions and encouragement and the use of various drugs. Unquestionably any therapy undertaken should include all the above. In addition, physical therapy helps greatly in many situations.

This study is undertaken with the view of

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demonstrating that various types of physical treatment which usually can be carried out best in an institution well-equipped for the purpose, should not be neglected in dealing with patients suffering with arterial hypertension. Chief stimulation for this study arose from the discovery that investigations of the records of Woman's Hospital physiotherapy department revealed that a very small percentage of the patients treated there were referred for treatment because of the presence of elevated blood pressure. It would seem that with all the advantage to be derived from physical therapy of hypertension, many patients should be enjoying it.

No theoretical discussion of the etiology of arterial hypertension is to be entered in; this subject has been discussed thoroughly in the literature, and it does not enter the scope of this paper. The comparative results of treatment of the different types of elevated pressure must be mentioned, however.

The secondary type, due to arteriosclerosis with or without reduced kidney efficiency, responds poorly, possibly temporarily, to physical therapy, as it does to the older measures of treatment. It is the primary or essential type which responds best, in line with our experience with previous remedies. These basic observations are confirmed in general by perusal of the literature.

LITERATURE

Articles regarding the use of physical therapy in the relief of arterial hypertension, are not abundant, but in many instances are enthusiastic. It is surprising that more cases have not been reported and more observations recorded in this common ailment. Most of the articles dealing with the treatment of hypertension, whether in magazine articles or modern books, omit the employment of physiotherapy or dismiss it with a few sentences. This statement is not meant to include various physical measures which may be carried out in the home, but refers to recommendations of treatment in well-equipped hospitals and institutions.

Firnbacher[1] states that carbonated baths, "pine needle" baths and ordinary warm baths give the same response. He tried artificial hyperthermia in four cases but noted only temporary results. Grover[2] reports one case in which he is certain that he noted definite softening of the sclerotic palpable arteries, and lowering of blood pressure by the use of diathermy.

DeKraft[3] mentions auto condensation in treatment of hyperpiesia as does Massy[4]. Stewart[5] favors auto condensation and cabinet baths. Cumberbatch[6] recommends diathermy highly, as do Russ[7], Voyles[8] and Arkenstedt[9]. Torbett[10] reports 200 patients treated in annual courses by warm baths, hot blanket packs, hot and cold showers, with good results. Warr[11] feels that whereas hydrotherapy and Nauheim baths are valuable, electricity is just coming into its own. Sir Humphrey Rolleston[12] mentions high frequency as a means of lowering blood pressure and asserts that repeated treatments will result in permanent lowering. He states that ultra violet light is reputed to do this also. Nelson[13] failed to secure permanent lowering of pressure in but two of thirty patients whom he treated with repeated courses. Humphries[14] urges the use of D'Arsonvalisation but cites no cases. Moor[15] reports 92 cases of high blood pressure, of which the origin of eleven was nephritic, 52 arteriosclerotic, and 29 idiopathic. His treatment was of most avail to the latter group, and of little help to those patients who had also kidney disease and changes in the blood vessel walls. Hay and Ince[16] report fourteen cases of hypertension with manifestations of angina pectoris or other complication, of whom nine were relieved. Sir Clifford Allbutt in 1925 said "D'Arsonvalisation is the most valuable immediate aid we possess in hyperpiesia."

There is nearly general agreement among writers that physiotherapy is of little value in lowering blood pressure to any marked extent if there is much arteriosclerosis or kidney damage present. Lewis believes that the reaction of active dilatation of the arterioles, capillaries, and venules to changes in temperature, may be expressed as (1) lessening of tone of these vessels by direct heat influence and (2) secondary increase in concentration of vasodilator bodies in the tissue spaces. These metabolites resemble histamine in action. They have an effect of long duration and are not abnormal body substances. Improvement of nutrition of the body results from this increased blood flow. Theoretically, changes such as occur in the skin also occur in blood vessels in the deeper parts of the body, under the influence of heat, and it is on this basis that diathermy is indicated when one desires to accomplish this effect. Freeing the histamine-like substances, causes a dilatation of the vessels throughout the area under treatment with consequent increased blood flow, improved nutrition and lowered arterial tension.

METHODS OF TREATMENT

It is necessary to take a small space for discussion of physical measures employed to reduce blood pressure, so that no misunderstanding may exist. This article is so titled as to make clear that the emphasis in treatment is laid upon physiotherapy as it can be carried out in well-equipped institutions. Strictly speaking, we might regard home methods of treatment, with hot baths, hot packs, sweats, etc., as types of physical therapy measures; however, these are not considered here, nor are other adjuvants of treatment such as diet, rest and drugs.

In our series of Woman's Hospital cases, the majority have been treated by means of the electric cabinet bath for the promotion of skin elimination. Massage and hydrotherapy in connection with the above have been used frequently.

Diathermy has been employed in the treatment of but few patients. The technic of treatments must vary considerably with the individual patient and needs no discussion here. It is rather a subject for physiotherapeutic specialists.

It is of interest to note that in the reports of the literature, much more emphasis is placed upon reduction of elevated blood pressure by diathermy, high frequency, auto condensation (used synonymously) than by other means. Perhaps this is true because it has always been realized that any measures (e. g. cabinet baths) that promote elimination will cause improvement in the patient, whereas the high frequency current as used in the treatment of hypertension, is of comparatively recent application, and therefore the object of peculiar fascination to observers.

REPORTS OF PATIENTS TREATED FOR HYPERTENSION WITH AND WITHOUT COMPLICATIONS

Name	Age	Complication		Type of Treatment		Average B. P.	
		Nephritis	Arteri-oscler's	High Frequency	Cabinet Baths	Before	After
Mr. S	66	0	Plus	Plus	0	180/120	160/100
Mrs. R	46	0	0	Plus	0	220/130	180/110
Mrs. G	55			0	Plus	205/100	180/100
Mrs. W	67			0	Plus	180/ 95	155/ 92
Mrs. R	40	0	0	0	Plus	200/100	180/100
Mrs. B	58	0	Plus	0	Plus	170/ 90	155/ 90
Miss L	58	0	Plus	0	Plus	190/110	160/100
Mrs. G	48	0	0	Plus	0	180/103	170/ 92
Mr. B	59	0	Plus	Plus	0	177/ 95	162/ 92
Mr. M	55	0	Plus	Plus	0	180/100	160/ 95
Mrs. W	65	0	Plus	0	Plus	210/ 95	165/ 80

REPORTS OF CASES

In studying the records of the physiotherapy department of Woman's Hospital, one fact is in remarkable evidence: that there are so few patients who have been treated for hypertension. Of the large number of cases treated in the past four years, there are only 17 which were designated as treated for high blood pressure. It is possible that there were a few which were overlooked because occasionally the diagnosis is omitted from the record cards, cases in which the referring physician specified the form of treatment desired without writing the diagnosis. It surprised me equally to find in going over records of 72 personal cases, that less than 10 percent had received the benefit of physiotherapy to help relieve their hypertension. We are all overlooking a valuable adjuvant in their treatment.

Of the 17 patients treated in the hospital, I have been able to secure reports on only seven, two of whom belong in my own series. In the following tabulation of eleven cases, the first seven are those just referred to; the last four are additional personal cases of my series who were treated elsewhere.

Of the total group only one has died—Mrs. R., aged 40, who had severe essential hypertension which killed her four months after her last treatment.

RESULTS

It is not worth while to make a detailed analysis of the series of cases, because the patients are too few in number. A few points may be noted, however. We may state that (1) each patient felt better after the series of treatments, and the longer the series the greater feeling of improvement was noted; (2) the systolic blood pressure lowered in each case after treatment; the variation being from 10 to 45 points; (3) the average diastolic readings were appreciably lowered in all but three cases, the decrease ranging from 0 to 20 m.m. of mercury; (4) less advantage from treatment was derived by the patients who suffered from arteriosclerosis than by those in whom the condition was primary essential hypertension. All these effects are in accord with those noted in the literature.

CONCLUSION

As a final observation, allow me to say that I am convinced from study of the cases reported above, and from perusal of the literature regarding this subject, that we who are interested in internal medicine are ignoring largely the benefit that may accrue to our patients with arterial hypertension by the employment of institutional physiotherapy in their behalf. Our series of cases is short, but the results are positive. We must conclude that physical measures are valuable adjuncts to our methods of treatment of high blood pressure.

Cedar and Lee Roads.

REFERENCES

1. Firnbacher, E.: Deutsches Arch. fur Klin. Med. No. 161: P. 1, Aug. '28.
2. Grover, B. B.: Treatment of High Arterial Tension: Phys Ther. Vol. XLIV, No. 5: P. 263, May '26.
3. DeKraft, Fred: Diathermy in Circulatory Disorders: Phys. Ther. Vol. XLIV, No. 5: P. 627.
4. Massy: Practical Electrotherapeutics & Diathermy: P. 324, '24.
5. Stewart, H. E.: Physiotherapy: '25.
6. Cumberbatch, E. P.: Diathermy: P. 191-199, '28.
7. Russ, S.: Proc. of Royal Soc. of Med.: P. 1677, Aug. '28.
8. Voyles, C. E.: Arch. of Phys. Ther. X-ray Radium: Vol. VIII, No. 5: P. 255, May '27.
9. Arkenstedt: Ky. Med. J.: P. 75, Feb. '27.
10. Torbett, J. W.: Phys. Ther., Vol. XLV: P. 549, Nov. '27.
11. Warr, O. S.: N. H. Med. & Sug. J., Vol. 79, No. 12: P. 907, June '26.
12. Rolleston, Sir Humphrey: Lancet: P. 41, Jan. 1, '27.
13. Nelson, H. R.: Can. Med. Asso. J., Vol. XVI, No. 6: P. 686, June '26.
14. Humphries, F. H.: Am. J. Electrotherapeutics & Radiology: P. 374, Oct. '25.
15. Moor, F. B.: Arch. Phys. Ther. X-ray Rad. No. 7: P. 397, July '26.
16. Hay & Ince: Lancet, No. 2: P. 799, Oct. 16, '26.

Infectious Mononucleosis

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INFECTIOUS mononucleosis was established as a distinct clinical entity by the reports of Sprunt[1] in 1920 and Longcope[2] in 1922. Previous to that time the condition was often confused with ordinary cervical lymphadenitis although there were on record observations showing that the disease occurred in definite epidemics. It was also confused with lymphatic leukaemia, especially in cases where the blood was examined, because of the striking preponderance of lymphocytes. At least some of the cases reported as non-fatal acute lymphatic leukaemia were what we now recognize as infectious mononucleosis. Even at the present time, many cases undoubtedly occur which are undiagnosed or incorrectly diagnosed when the disease occurs sporadically, because it often resembles clinically, in a general way, many of the common mild systemic infections and can be differentiated from them only by the results of the differential leukocyte count. When it occurs in epidemics the physician is usually stimulated to a thorough investigation of the blood smear and the mononuclear preponderance points the way to the correct diagnosis. Infectious mononucleosis is not a common disease, is rarely severe and never fatal unless complicated. It occurs usually in young adults and the clinical picture is that of a mild general infection with rather abrupt onset extending over two to three weeks, giving rise to a temperature of 101°F. to 103°F., with the expected pulse and respiration graphs. Many of the reported cases have occurred among university students.

Sprunt and Longcope give detailed descriptions of the clinical course and pathologic findings. Balbridge[3] also Downey[4] have published exhaustive cytologic studies of the abnormal leuckocytes. In a fairly large series of cases reported by Longcope[2] the leukocytes averaged 15,000 cells per cu.mm., 40 per cent small mononuclears and 10 per cent large. The abnormal forms varied from 3 per cent to 57 per cent. A white count of 35,000 has been reported and the mononuclear percentage may rise to 99.

The etiology is obscure, but it is believed that the disease results from invasion by a specific organism stimulating a mononuclear response. The treatment is symptomatic only.

The case presented here was sporadic and is exceptional in that a leukopenia and mononucleosis have persisted for six weeks after recovery.

CASE REPORT

N. H., a college girl aged 17 years, entered the college hospital (Allen Hospital), November 29, 1929, complaining of severe headache. She stated that for a day or two previously she had felt indisposed and on the day of admission had noticed that some of the glands in her neck were swollen and slightly tender. There had been no sore throat.

Her past history was quite irrelevant. She had had whooping cough, measles and chicken-pox in childhood; appendectomy four years ago; and fracture of the ankle six months ago.

Her father and mother and three brothers were living and well. There was no history of any familial disease.

On admission to the hospital her temperature was 100°F; her pulse 80 and respirations 20 per minute. She was well developed, well nourished, and somewhat pale. There was no evidence of nasopharyngeal inflammation and the accessory nasal sinuses were negative. The throat showed only slight redness of the pillars and the tonsillar fossae were clean. The ear drums were normal. A few lymph glands along the posterior border of the sternomastoid on either side were enlarged varying in size from that of a pea to that of an almond, were of rubbery consistency, freely moveable and slightly tender but not painful. The heart and lungs were normal and the abdomen was negative except for the right lower quadrant scar. The spleen and liver were not palpable. Extremities were normal except for the moderate swelling of right ankle which remained from the healing fracture. The superficial and deep reflexes were normal. The blood count (see table) was 8450 W.B.C. of which 43 per cent were mononuclears. The urine was negative. For two weeks (until Dec. 14) her condition remained about the same, temperature fluctuated from normal or a little above in the morning to 100°F or 101°F in the evening. The pulse varied between 70 and 90, and the respirations remained normal. The severe headache was difficult to control, she was nauseated most of the time and vomited frequently. On December 2, the glands in the axilla were moderately enlarged and tender and there was a pea sized gland in each inguinal chain. A few days later all superficially located lymph glands were definitely enlarged including, anterior and posterior cervical glands, submental, supraclavicular, axillary, epitrochlear, pectoral and inguinal glands. During the last week of her illness there was moderate oliguria, with highly concentrated urine and a slight trace of albumin.

BLOOD FINDINGS IN CASE OF INFECTIOUS MONONCLEOSIS

	Dec. 1	Dec. 5	Dec. 6	Dec. 16	Dec. 28	Jan. 11	Jan. 22
R. B. C.		5,090,000		5,000,000	4,600,000		
Hgbn.				77%	85%		
W. B. C.	8,450	15,400	17,100	6,650	5,750	5,550	5,800
Neutrophiles	56%	38%	22%	22%	34%	48%	55%
Basophiles	1%		3%			2%	3%
Large Mono.	10%	2%	17%	11%	18%	5%	10%
Small Mono.	33%	60%	58%	67%	48%	45%	32%

Only rarely was an anormal leukocyte found and when found was placed in the group which it most closely resembled.

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Her color became subicteric, especially noticeable about the face, head and neck, and beginning December 7 she complained of considerable generalized purpitus which lasted several days. Her temperature gradually fell to normal, she improved subjectively and was up and about December 15. The glands remained palpable until the last of December.

REFERENCES

1. Sprunt, Thomas P., & Evans, F. A.: Monouclear leukocytosis in reaction to acute infections. Bull. Johns Hopkins Hospital. 1920, XXXI, 410.

2. Longcope, Warfield, T.: Infectious mononuclosis with a report of 10 cases. A.J.M.S., 1929, clxiv. 781.

3. Balbridge, C. W., Rohmer, F. J., and Hansmann, G. H.: Glandular Fever, Arch. Int. Med. 1926, xxxviii, 413.

4. Downey, H., & McKinlay, C. A.: Acute lymphadenosis compared with acute lymphatic leukaemia, Arch. Int. Med., 1923, 32, 82.

Medical Certificates for Federal Employment

Physicians are urged to exercise care and accuracy in executing medical certificates on civil service applications in a recent statement issued by the United States Civil Service Commission.

"The government, and applicants for examinations themselves, are frequently embarrassed by the improper execution of medical certificates attached to applications for federal civil service examinations," the statement issued by the Commission said.

"New appointees are required to undergo a physical examination by a government medical officer before entering upon duty. For many examinations a preliminary medical certificate is required in connection with the application for examination, for consideration in determining eligibility for examination and in some cases for rating on the element of physical ability. Frequently, government medical officers find in the examination at the time of appointment, physical disqualifications which must have existed when the preliminary medical certificate was executed by the private practitioner, although no mention of such physical defects is found in the private practitioner's medical certificate. Such a situation presents a problem to the government, especially if the appointee has traveled a considerable distance to accept the appointment. In many cases the appointment must be canceled, with the resulting loss of time and money to the disappointed applicant.

"The Civil Service Commission feels that these discrepancies between medical certificates executed by private practitioners and those made later by government medical officers are due in some cases to carelessness upon the part of the private practitioners and in others to a liberal attitude deliberately assumed in the mistaken belief that by ignoring or minimizing physical defects the applicant is assisted in obtaining employment.

"The Civil Service Commission's forms for medical certificates attached to application blanks are comprehensive and clear. If all private practitioners will exercise due care when filling out the certificates they will not only render a service to the government but will also give the maximum service to the applicant who pays the fee for the preliminary physical examination."

Progress Against Medical Radio Quackery

At the recent annual meeting of the State Association, the House of Delegates, in the interests of public health and welfare, pledged the aid and cooperation of the various component county medical societies to authorities now engaged in eliminating from the radio, quacks and charlatans and promoters of dangerous and injurious health and medical schemes and devices.

Almost simultaneously with the action of the House of Delegates was a pronouncement of a drastic policy adopted by the Federal Trade Commission regarding fraudulent advertising and the issuance of a warning by W. E. Humphrey, a member of the commission, that "publishers, advertising agencies and the radio stations hereafter must be prepared to defend any advertisements they handle".

"The law", declared Mr. Humphrey, "makes them liable for any fraudulent advertisements to which they may help give publicity, and the commission will make them parties in all actions brought against the advertiser where they have assisted him in his fraudulent scheme."

With special reference to the part the medical profession may play in this nation-wide campaign to ban advertisements of worthless remedies for physical ailments and deformities, Commissioner Humphrey said:

"These quacks can always find crooked but shrewd and able physicians to testify as to the merits of their wares. In order to meet this testimony, the Commission must have the evidence of high-class physicians. In behalf of the commission and the public, I appeal to the physician individually and to the American Medical Association, and to the various other medical associations throughout the country, to help us in this matter of furnishing expert testimony. The funds of the commission that could be used to pay such experts are extremely limited. In no other way can a doctor perform greater public service than to help drive these frauds out of business."

An opportunity for Ohio physicians to be of material aid in the war on advertising quackery is here presented. As pointed out, authorities need the cooperation and help of the medical profession in this move to protect the public health. Ohio physicians should be prepared to respond if and when called upon to furnish the scientific and technical knowledge needed to stamp the claims of medical-health fakers, false and dangerous.

State Institutional and Welfare Program Including Mental Hygiene Features Planned for Ten-Year Period

Among pieces of major legislation which the Eighty-Ninth General Assembly will be called upon to consider at its session next January will be a gigantic welfare program calling for changes in the present state system of caring for and institutionalizing prisoners and other state wards.

Several investigations and studies are being conducted at the present time in Ohio for the purpose of gathering data and statistics for the State Department of Public Welfare which will play the leading role in formulating the proposed legislation.

The recent Ohio Penitentiary disaster was largely responsible for the speed with which the various commissions and agencies are working in rounding up data and consolidating the numerous suggestions being advanced into one institutional program to be presented to the Legislature.

Chief among the groups at work in attempting to find a solution to some of the welfare problems confronting the state is the advisory welfare commission appointed by Governor Cooper shortly after the penitentiary fire and composed of Julius F. Stone, Columbus; A. E. Anderson, Cincinnati; Grove Patterson, Toledo; Dudley S. Blossom, Cleveland, and Harry McLaughlin, Cleveland.

As a result of several conferences with state officials and others informed on the institutional problems of the state, the Cooper advisory commission has developed some concrete ideas as to how it believes some of the problems should be solved.

The commission has reached the conclusion that some system of segregation and classification of prisoners and state wards should be established as an important step in remedying unsatisfactory conditions in both the penal and mental hygiene institutions.

A plan, suggested by State Welfare Director H. H. Griswold, has been approved by the commission and funds for carrying out Griswold's ideas have been voted by the State Emergency Board.

Mr. Griswold's plans call for the establishment of a division of psychiatry in the State Department of Welfare, to be composed of three psychiatrists and three psychologists. These specialists, under the Griswold plan, would begin as soon as possible the work of examining the inmates of all state institutions to obtain data on some plan of segregation and classification of state wards.

No definite procedure for the classification of inmates will be worked out until the psychiatrists and psychologists have completed their survey, it is said. It is understood that efforts will be made to eliminate in any legislation on this particular question which may be presented, certain features which were injected into former classification proposals and which were objected to by previous Legislatures.

Another important task which the Governor's welfare commission is struggling with is that relative to the expansion of the state's facilities for housing the wards of the state. Visits to all the various state institutions are being made by the members of the commission to obtain information on the needs of each institution and get suggestions from the various institutional heads as to ways to remedy the congested conditions which exist in practically all of them.

Welfare Director Griswold and his institutional directors are at the present time gathering data for a budget for a 10-year building program. This data, according to Mr. Griswold, will be submitted to the advisory commission for its action before the program is subsequently submitted to the State Legislature.

Mr. Griswold in a recent public statement called attention to some of the factors which should be taken into consideration in calculating the institutional needs of Ohio for the next ten years, thereby indicating a few of the questions which will be presented to the governor's commission for analysis and action.

"A building program for a period of 10 years," declared Director Griswold, "should not be based on the unalterable assumption that the rate of increase in institutional population in the next 10 years will continue at the rate it has shown during the past 10 years. The present acute conditions in the custodial institutions of the state are the result of an abnormal increase during the past few years and of a retarded building program during the same time.

"There is every reason to hope that the rate of increase will not continue for an indefinite period. Certain compensating and corrective forces are at work which, if properly used, may ultimately cut down the rate of increase at which commitments are made to our institutions.

"A more liberal and a more effective use of probation will certainly result in a larger number of those convicted of crime being committed to the care of probation officers and avoiding the necessity of commitment to a penal institution. A progressive and effective program of mental hygiene will in time prevent many from being committed to our hospitals for mental hygiene; and a more effective social service check-up of those who are released from hospitals on trial visit will result in a smaller rate of readmissions.

"There is an ever-increasing interest in the efforts that are being made toward prevention of juvenile delinquency and crime. There can be no

doubt but that these factors will begin to show their effect within the period of 10 years.

"Therefore any building program that is projected for that period should be of such a nature that it can be curtailed at any point in the procedure without destroying the fundamental plans. The erection of monumental buildings for the care of such custodial patients is neither necessary nor desirable.

"As soon as the results of the federal census of 1930 are available an attempt will be made to forecast institutional populations. This forecast will be checked against the experiences of other states comparable in size to the state of Ohio in size and industrial development.

"When once a conclusion has been reached as to the extent of the custodial capacity that will be needed within this period, it will be economy for the state to build this fast enough and big enough so that the increased institutional capacity can have its part in a preventive program in addition to taking care of custodial needs.

"Hospitals for the insane in Ohio have been so congested that the best results in treatment could not be expected. If the hospitals were given facilities with which to take care of the mental cases early in their development, the number of permanent custodial charges in our institutions would tend to decrease. If the prisons of Ohio could be relieved of a part of their congestion by the building of additional units and the rehabilitating effect of the prison could be felt on the life of the prisoner, there would be fewer violations of parole and an ultimate decrease of the burden on the taxpayer's shoulders.

"If the institutions for the feeble-minded could receive and care for the type of delinquent children who become the mothers and fathers of another generation of delinquents, the ultimate burden upon the taxpayer in the next generation would be measurably less. This does not mean that we should adopt a policy of institutionalization of all defectives; in fact, the policy of the state should be to avoid institutionalization wherever possible.

"The heavier part of the building program should be done during the first five years of the decade. If it does appear during these first five years that the corrective effect of constructive welfare policies in the state is decreasing the number of defectives needing institutional care, the building program can be curtailed then."

By the coordination of plans drafted by the State Department of Welfare and suggestions from the governor's advisory commission, steps to expand facilities where they are urgently needed at the present time are already underway.

Plans for the erection of a new dormitory accommodating approximately 500 prisoners, for which funds have been appropriated by the Legislature, at the Mansfield Reformatory, have been approved and work on the project is expected to be started soon.

The State Board of Control has authorized the transfer of $223,000 to enable immediate construction of a new dormitory at the London Prison Farm. This dormitory will accommodate 1000 prisoners. One which will house 500 men is in the course of construction.

The welfare advisory commission has adopted a resolution approving the Grafton site, Lorain County, as a suitable place for "some kind" of a penal institution of between 1000 and 1200 inmates. It has been suggested that it be used as a farm colony for the Mansfield Reformatory.

Money for the work at the London Prison Farm was obtained by the transfer of funds which had been appropriated by the Legislature for projects at several of the other state institutions, including cottages for resident physicians at a number of the mental hygiene hospitals.

It is intimated that part of the program to be presented to the Legislature will have to do with the further expansion of the London farm so as to relieve permanently the congestion at the Ohio Penitentiary.

Director Griswold's suggestion for further revision of the state's parole system has received the preliminary approval of the Cooper commission which at its last meeting approved a plan for the employment of six new parole officers and a chief parole officer, making a total of 16. Under this plan each parole officer would handle from 175 to 200 cases instead of 275 to 300. The commission was of the opinion that this obligation later should be reduced still further.

One of the most interesting studies already completed on certain phases of the mental hygiene situation in Ohio is that made by a special committee, composed of members of the Managing Officers' Association, appointed by Director Griswold to outline a plan for fixing standards for transfers from one institution to another to adjust institution populations.

This committee, consisting of Dr. E. J. Emerick, former director of the State Bureau of Juvenile Research, Columbus, and Dr. W. H. Pritchard, superintendent of the Columbus State Hospital for the Insane, in its detailed and comprehensive study and survey of conditions as they exist at present in the state, makes some important recommendations to the State Department of Welfare relative to steps which might be taken to remedy flaws in the institutional system.

Dr. Emerick and Dr. Pritchard in their report point out that a survey of the institutional service shows the following conditions:

1. In the penitentiaries and the reformatories for men and women are many individuals who are feeble-minded, usually with psychotic episodes; a considerable number who also are definitely psychotic, and still others who have unstable psychopathic personalities.

2. In the industrial schools are many who are feeble-minded with and without psychotic episodes; those who are already showing evidences of definite psychosis, and those who are psychopathic, whose criminal tendencies have become more or less fixed.

3. In the institutions for feeble-minded there are many who have definite psychotic episodes or who have decided psychopathic and criminal tendencies, and who are out of place in these institutions.

4. In the district state hospitals for the insane there are numbers of patients who are feeble-minded rather than insane.

5. In the district state hospitals, the institutions for feeble-minded, and penal and correctional institutions there is a considerable sprinkling of epileptics.

"The remedy for these conditions is easily stated but not so easily carried into execution", according to the committee, despite the fact that the State Department of Public Welfare has the legal authority to make a classification of inmates of all institutions and make such transfers as it deems advisable, because of the lack of proper facilities in the way of personnel and equipment.

Objectives which should be borne in mind in attempts to remedy these situations are, according to Dr. Emerick and Dr. Pritchard:

1. The transfer of all prisoners in the penitentiaries and reformatories who are definitely psychotic, or who are feeble-minded with psychotic episodes, or who have pronounced psychopathic personalities with incorrigible criminal tendencies, or who are epileptics, to the State Hospital for the Criminal Insane.

2. The transfer of all juvenile offenders in the industrial schools who are definitely psychotic or who are feeble-minded with definite psychotic episodes to a state hospital.

3. The transfer of juvenile offenders in the industrial schools who are psychopathic with pronounced criminal tendencies to a special institution established for the care of this class.

4. The transfer of all juvenile offenders in the industrial schools who are feeble-minded with a mental age under seven years to an institution for the feeble-minded.

5. The transfer of patients in the district state hospitals to the State Hospital for the Criminal Insane when they show definite criminal tendencies whether they have the ordinary forms of mental disease or are feeble-minded or psychopathic with psychoses.

6. When the feeble-minded individuals in the institutions for feeble-minded develop decided psychotic tendencies they should be transferred to a state hospital or the State Hospital for Criminal Insane providing they display pronounced criminal tendencies.

7. The transfer of individuals in the state hospitals who are feeble-minded but not psychotic to an institution for feeble-minded.

8. The transfer of epileptics in the industrial schools and mental hygiene institutions to an enlarged or perhaps a duplicated State Hospital for Epileptics.

Elaborating on these points, Dr. Emerick and Dr. Pritchard cautioned that two essentials must be executed before attempts be made to provide remedies, namely:

1. An adequate and painstaking survey of each state institution for the purpose of identifying and tabulating the various classes.

2. Financial provision for the construction and alteration of institutions and the rearrangement of institution districts in such a manner as will render possible the separation, the segregation, the employment and the treatment of these various classes.

The report also points out specific cases where remedies through rearrangement and alterations are necessary and recommends how these remedies can be accomplished. Some of these recommendations are as follows:

The capacity of the Lima State Hospital for the Criminal Insane should be much increased and plans made for a separate department for those transferred from the penitentiaries and reformatories and who have a definite maximum sentence to serve.

The London Prison Farm should be increased to its full capacity and a stockade placed around a considerable section of farm land at the institution. It also is recommended that provisions be made for a hospital, with adequate personnel and equipment, for tubercular prisoners and that all tubercular prisoners in the penitentiary and reformatories be transferred there.

Construction of the Institution for the Feeble-Minded at Apple Creek should be rapidly pushed to completion and should be brought up to a maximum capacity of 3000 inmates as quickly as possible.

The district of the Columbus Institution for Feeble-Minded should be changed so that this institution would serve a district consisting of the counties in central and southeastern Ohio.

The Orient Institution for the Feeble-Minded should be established as an independent unit and should serve in a similar way the counties in western Ohio until such a time, at least, as a new institution shall be established in the Cincinnati district. When that is accomplished, the Orient institution could be converted to some other use.

The Athens State Hospital should be enlarged to accommodate 2000 patients, and its district should be changed in accordance with the enlargement of the hospital by the addition of Muskingum, Guernsey, Belmont, Harrison and Jefferson Counties, and the transfer to the Dayton district of Adams, Highland, Ross and Pickaaway Counties.

The Dayton State Hospital should be enlarged to accommodate 2000 patients. The district should be changed by the addition of Brown, Adams, Highland, Ross, Pickaway, Fayette, Madison, Hardin and Auglaize Counties.

The Cincinnati district should be reduced by the transfer of Brown County to the Dayton district.

The Toledo district should be changed by the transfer of Auglaize County to the Dayton district and Richland County to the Columbus district, and the addition of Medina County from the Massillon district.

The Columbus district should be changed by the transfer of Fayette, Madison and Hardin Counties to the Dayton district; Muskingum, Guernsey and Belmont Counties to the Athens district, and the addition of Richland, Ashland, Wayne, Holmes and Tuscarawas Counties.

The Massillon district should be changed by the transfer of Harrison and Jefferson Counties to the Athens district; Tuscarawas, Holmes, Wayne and Ashland Counties to the Columbus

district; Medina County to the Toledo district, and the addition of Lake and Geauga Counties from the Cleveland district.

The Cleveland district should include only Cuyahoga County and the branch institution at Hawthornden should be brought up to its full capacity at once. Still another institution near Cleveland will be necessary sooner or later, the report states.

"While the increases and rearrangements summarized will probably take care of the increasing insane population for the next decade, it will no doubt be necessary for the state to provide another State Hospital with an independent district in northern Ohio within the next fifteen or twenty years," Dr. Emerick and Dr. Pritchard stated.

"Mention has also been made of the desirability of relief for the Ohio Hospital for Epileptics," the report says. "Considering the location of this institution and the topographical limitations to its great expansion, the construction of a new institution for this purpose may be considered necessary. Since a new institution for the feeble-minded is already in prospect for southwestern and western Ohio, it may become feasible to transfer the feeble-minded from the institution at Orient and use it for another purpose. While not ideally located for the purpose of serving northern Ohio it would otherwise be admirably adapted to the care of epileptics."

A construction program for the various state institutions and totaling $2,689,500 had been planned previous to the Ohio Penitentiary disaster. Emergencies arising from the penitentiary tragedy have caused a shift in certain phases of this program, but a large part of the projects will be completed during 1930, according to the latest announcement of Mr. Griswold.

Among the projects for which plans are being drawn and which the State Department of Welfare hopes to have underway by the end of this year are:

Cleveland State Hospital and Hawthornden Farm improvements, $421,000.

Power house, $250,000; tuberculosis ward, $40,000; general remodeling, $25,000 at the Longview State Hospital, Cincinnati.

Improvements totaling $14,500 at the Toledo State Hospital.

New $125,000 cottage at the Massillon State Hospital.

Two cottages, the aggregate cost of which will be $150,000 at the State Hospital for Epileptics, Gallipolis.

Development of the new Hospital for Feeble-minded, Apple Creek, at a cost of $1,150,000.

Improvements at Soldiers' and Sailors' Home, Sandusky, $10,000.

New cottage and sanitary improvements at Boys' Industrial School, Lancaster, $100,000.

New cell block and other improvements at Ohio Penitentiary, $89,000.

New construction at London Prison Farm, $117,000.

New dormitory, $90,000, at Mansfield Reformatory.

New water system and school building, $60,000, Reformatory for Women, Marysville.

Construction at Institution for Feeble-Minded, Columbus, and farm for feeble-minded at Orient, $25,000.

Projects which had been started but were unfinished on January 1, 1930, and will be completed if possible during 1930 were listed by Mr. Griswold as follows:

Cleveland State Hospital — Remodeling of wards, $33,000.

Longview State Hospital—Lands and development at Otterbein, $300,000; repairing and remodeling wards, roofs, plumbing, lighting and fire protection systems; renewals of wards, completion of water systems and construction of tunnels and roads, $133,000.

Columbus State Hospital—Renewal of roofs, $10,000.

Toledo State Hospital—Feed storage barn, $8000; fire protection system, $5000.

Ohio Hospital for Epileptics—Cottage, $125,000; porches for cottages, $16,500; school for boys, $25,000.

Institution for Feeble-Minded at Columbus—Addition to dairy barn, $4000; repair and replacement of plumbing, $7500; sidewalks and roads, $5000.

Ohio State Sanatorium—Electric wiring, $2000.

Boys' Industrial School—Various remodeling, $13,200.

Ohio Penitentiary—Cell blocks, $115,000; industrial building, $125,000.

Ohio State Reformatory—Dormitory at Grafton farm, $56,000; new wing to furniture factory, $50,000.

It was pointed out that projects costing $1,343,950 had been completed during 1929. These were listed as follows:

Cleveland State Hospital—Industrial building, $35,000; cottage and equipment, $150,000. Hawthornden farm—Horse and cow barn equipment, $30,000; new power house, $106,000.

Columbus State Hospital—Additions to wards, $100,000.

Longview State Hospital—Remodeling old chapel, $30,000; tunnels, $45,000; electric elevator in main building, $10,000.

Massillon State Hospital—Cottage, $125,000.

Toledo State Hospital—Cottage, $160,000; dairy barn, $24,000; poultry plant, $2000; piggery, $2000; water tower and piping, $10,000; shelter shed, $2950; garages, $2000.

Institution for Feeble-Minded at Columbus—Power house and equipment, $175,000; garages, $3000; renewal of roofs, $5000; roads, walks and drives, $1500.

Institution for Feeble-Minded at Orient—New wing to laundry, $30,000.

Ohio State Sanatorium—Root cellar, $2000; garage for employes, $2500; new roofs, $2500; hard-surface roads, $5000.

Ohio Soldiers and Sailors' Home—Drain gutters, $2000; floors for wards in hospital, $3500; renewal of sewage disposal plant, $10,000.

Boys' Industrial School—Repairing old tunnels, $4000.

Girls' Industrial School—Tuberculosis ward at hospital, $15,000.

Ohio Penitentiary—Remodeling hospital, $9000; cell block, $75,000; honor dormitory, $30,000.

London Prison Farm—Power plant and equipment, $100,000; waterworks, $35,000.

Social and Welfare Theories of Government Are Involved in Legislative Program of Non-Service Disabilities

President Hoover's recent veto of a Senate bill establishing a new basis for pensions for veterans of the Spanish-American War and the subsequent action of Congress in enacting the measure over his objections have called forth considerable discussion and comment regarding the nation's present and future policy in the matter of war veterans' relief generally.

The varying differences of opinion among public officials about war pensions and veterans' relief indicate the seriousness of the whole question which merits the thoughtful consideration of the entire nation.

While Mr. Hoover's brief veto message did not go very deeply into the fundamental principles of veterans' relief, it did raise several important points which merit careful study.

The President's chief objections to the measure were:

1. That it opens the door for claims of disability incurred at any time from venereal diseases, alcoholism, drug habits and other "vicious habits".

2. That it lowers the minimum service period for nonservice connected disability pensions.

3. That it fails to set up a requirement of need for disability pensions.

Explaining his views on the bill, Mr. Hoover said:

"I am in favor of proper discharge of the national obligation to men who have served in war, have have been disabled and are in need. But certain principles are included in this legislation which I deem are opposed to the interest of both war veterans and of the public.

"In the whole of our pension legislation over past years we have excluded from such national award persons whose disabilities arise from 'vicious habits'. This bill breaks down that exclusion and opens the door for claims of disability incurred at any time from venereal diseases, alcoholism, drug habits, etc. Certainly such claims for public help cannot be fairly based upon sacrifice to the nation in war and must be opposed to national policy.

"This legislation lowers the minimum service period from 90 days to 70 days for nonservice connected disability pensions. The 90-day minimum service has been maintained against Civil War veterans all these years because less service than this was not considered to imply personal danger and risk which warranted pension. If injury or impaired health incident to service is clearly proved, other laws cover such cases.

"It seems to me that in the interest of justice to the taxpayer and to maintain the fine body of citizens comprising our war veterans free from the stigma of encroachment upon the public treasury there should be a requirement of 'need' as well as disability as a basis for these pensions. It is to me the height of injustice that citizens who are less well placed should be called upon to support from taxes those whose station in life enables them to support themselves or to live in independent security.

"The whole spirit of the pension system is that of a grateful nation rising to the support of those who have served in war, were injured, or who have met with legitimate difficulties in after life which impose privation upon them."

Other measures liberalizing existing war veterans' legislation, some of which are not in accord with the fundamental principles underlying sound social welfare programs, are now pending in Congress. Additional benefits for veterans of the World War especially are being urged and have been for the past few years.

Approximately $30,000,000 has been appropriated by Congress within the past two years for additional federal hospitals, domiciliary and out-patient dispensary facilities for former soldiers, despite the fact that at the present time the existing hospitals for war veterans are only about half filled by patients suffering from service-connected injuries and diseases.

The medical profession always has been intensely interested in all questions of veterans relief, both from a humanitarian and professional standpoint. The physicians of the nation have been more closely associated with the country's veterans' relief program than any other one group or profession.

It has always been the conviction of the medical profession generally that it is the duty and responsibility of the federal government to provide the best medical, surgical and hospital service available for those disabled through war service, as well as to make available such service for those who are unable to pay for treatment even for nonservice connected disabilities.

On the other hand, the medical profession has not endorsed the social theory that the federal government is obligated to provide medical, surgical and hospital service for persons who have been disabled as a result of civil pursuits in no way connected with military service, and who are amply able to pay for such service.

The latter practice has sprung up during recent years through liberalization of the laws and regulations governing veterans' welfare work. The criticism offered by many who have devoted serious thought and study to the present program is that the nation already has overstepped the bounds of rationalism and is leaning more and more toward the evil and detrimental policy of socialized state medicine.

A clear-cut opinion on the seriousness of the problem confronting the country in respect to its veterans' welfare work was expressed in the annual report of the Bureau of Legal Medicine and Legislation of the American Medical Association to the House of Delegates at the recent A.M.A. meeting at Detroit. That report said in part:

"The policy that the government has adopted with respect to the medical, surgical, hospital, nursing and dispensary care of veterans is a policy that places the federal government in competition with private practitioners and private hospitals with respect to such services", the report declared.

"The federal government can offer such care without cost to the beneficiary only because it can compel the taxpayers to pay for such gratuities. The private practitioner and the private hospital, however, whose very existence depends on their earnings must look to their individual patients for compensation; they cannot do as the government is doing, furnish free services and then compel some person other than the beneficiary to pay for them. The present situation began with a seemingly harmless provision introduced into the World War Veterans' Act of 1924 authorizing the director of the Veterans' Bureau to allow veterans suffering from injuries and diseases *not* of service origin to occupy beds *not needed for injuries and diseases that originated in the service.* Now, however, the government is constructing numerous hospitals and providing many beds, solely to accommodate persons suffering from diseases and injuries *in no way relating to service.* The excessive demands that have heretofore been made for such socialistic service from the federal government have been and are leading to still further demands, and the end is not yet in sight. The situation is grave."

Quoting from a recent statement made by Brigadier General Frank T. Hines, director of the U. S. Veterans' Bureau, "the government is at a critical point in its veterans program".

Addressing the medical council of the Veterans' Bureau on the question of providing more hospitals for ex-soldiers, General Hines declared:

"I think we can limit our discussion almost entirely to the nonservice cases, because, with approximately 50 per cent of the beds now occupied by nonservice cases, most certainly we can only approach construction for the future on the ground of the noncompensable load. It is therefore imperative that we ascertain as nearly as possible just what it will mean if Congress is to embark definitely upon a construction program for the non-service connected cases. * * * We have before us now the proposition of taking care of all veterans, without any restrictions as to their need, that is, whether they could, perhaps, provide hospitalization and medical care for themselves, and I feel that this factor also should be given some consideration at this time."

The nation has reached a point in its efforts to pay its debt of gratitude to those who served in time of stress where it must make a definite decision as to its future policies. The time has arrived when sentiment must be considered with sound and accurate judgment, with fundamental economic and governmental principles as a basis.

Congress, representing the nation, must decide now whether it shall or shall not commit itself and the nation to a broad program of socialized free medicine. The socialistic programs which have had an evil and detrimental effect in several other nations must also be considered.

Ohio Physicians Have Prominent Part in A. M. A. Meeting

Several hundred Ohio physicians were among the thousands of physicians and guests who attended the Eighty-First Annual Meeting of the American Medical Association in Detroit, June 23-27.

Members of the Ohio State Medical Association, as usual, played prominent parts in the business and scientific activities of the meeting.

Dr. J. H. J. Upham, Columbus, member of the Board of Trustees of the A.M.A. and of the Committee on Scientific Exhibit, and Dr. Geo. Edw. Follansbee, Cleveland, chairman of the Judicial Council of the A.M.A., took an active and prominent part in the business sessions held during the gathering. Ohio also was ably and actively represented in the House of Delegates by Drs. Follansbee, C. W. Waggoner, Toledo; Wells Teachnor, Sr., Columbus; Ben R. McClellan, Xenia; E. R. Brush, Zanesville; J. P. DeWitt, Canton, and C. E. Kiely, Cincinnati.

Among Ohio physicians who took part in the scientific program as essayists, discussants, exhibitors or demonstrators were:

Howard T. Karsner, Cleveland; Robert Carothers, Cincinnati; Harold R. Conn, Akron; James A. Dickson, Cleveland; J. A. Freiberg, Cincinnati; John A. Judy, Dayton; M. Jennings King, Wellsville; E. E. Wilson, Columbus; V. C. Myers, Cleveland; Edward Muntwyler, Cleveland; C. T. Way, Cleveland; H. L. Reinhart, Columbus; W. N. Taylor, Columbus; Benjamin S. Kline, Cleveland; Otto Glasser, Cleveland; Thos. J. Hill, Cleveland; J. T. Wearn, Cleveland; Carl R. Steinke, Akron; Robert Cofield, Cincinnati; M. A. Blankenhorn, Cleveland; T. E. Jones, Cleveland; Eslie Asbury, Cincinnati; William D. Fullerton, Cleveland; Robert L. Faulkner, Cleveland; Albert L. Brown, Cincinnati; Mary Knight Asbury, Cincinnati; William V. Mullin, Cleveland; Henry M. Goodyear, Cincinnati; William B. Chamberlin, Cleveland; Samuel Iglauer, Cincinnati; John A. Gammel, Cleveland; E. E. Ecker, Cleveland; Robert E. Barney, Cleveland; Otto P. Geier, Cincinnati; W. E. Lower, Cleveland; Walter G. Stern, Cleveland; J. J. Kurlander, Cleveland; B. J. Hein, Toledo; Ralph G. Carothers, Cincinnati.

Large Class of Applicants Take June Examinations Before State Medical Board—The Questions Asked

Three hundred and thirty persons took the midsummer examinations given by the State Medical Board at Columbus, June 10, 11 and 12.

Those who took the examinations for licenses in medicine and surgery numbered 197. All of the applicants were graduates of Class A, American medical schools, with the exception of two, one of whom was a graduate of the University of Edinburgh and the other a graduate of the University of Athens, Greece. This is the first time in the history of the Board that all the applicants from American colleges have been graduates of Class A medical schools.

In addition, the following took examinations for licenses in their respective fields of practice: 28 osteopaths, 15 chiropractors, 11 mechanotherapists, 2 electrotherapists, 3 cosmetictherapists, 39 chiropodists and 35 masseurs.

The successful applicants in medicine and surgery will be announced at the next meeting of the Board, to be held in Columbus, July 8.

Questions asked the medical and surgical applicants in the written examinations follow:

MATERIA MEDICA

1. Name two preparations of arsenic. Give the dosage, action and uses of each.
2. Atropin (a) Give its source (b) Give signs of an overdose.
3. Digitalis (a) Discuss its action on the heart muscles and its diuretic action (b) How does digitalis affect blood pressure?
4. (a) Give two effects of expectorants
   (b) Name two drugs in each class, giving dose.
5. (a) How do hypnotic drugs produce their effects?
   (b) Give four signs of acute chloral poisoning.
6. What is barbital Give hypnotic dose for an adult.
7. Discuss briefly action of morphine group
   (a) for the relief of pain
   (b) for the relief of cough
   (c) for the production of sweating.
8. Name two drugs that lower blood pressure and analyze their modes of action.
9. Write prescriptions for (a) an ointment for scabies (b) a hypnotic.
10. Cocain (a) Explain action as a local anesthetic (b) What is the purpose of combining epinephrin?

PRACTICE

1. How would you recognize insulin shock and how (a) prevent it, (b) treat it?
2. How would you recognize the occurrence of empyema in pneumonia? Give the treatment.
3. Describe the symptoms of endocarditis arising during an attack of acute rheumatic arthritis. How would you treat it?
4. Name the three probable terminations of arterial hypertension and the clinical and physical findings which may enable one to suggest the most likely to occur in a given case.
5. What clinical conditions result in childhood from foods deficient in Vitamins D and C? Give treatment of each.
6. Give the symptoms and treatment of laryngismus stridulus (spasmodic croup).
7. Give the treatment of broncho-pneumonia in a child of four years.
8. Describe the symptoms showing the involving of the nervous system in pernicious anemia.
9. Discuss the symptoms and possibilities of cerebral arterio-sclerosis.
10. Give the symptoms and treatment of facial erysipelas.



OHIO STATE MEDICAL BOARD

Standing, left to right: J R. Shoemaker, Cuyahoga Falls; J. K. Scudder, Cincinnati; J. F. Wuist, Dayton; H. M. Platter, secretary, Columbus. Sitting: J. G. Blower, Akron; Lee Humphrey, Malta; T. H. George, Cleveland; J. H. J. Upham, Columbus.

CHEMISTRY

1. Name any two common poisons used for suicidal purposes and give the chemical antidotes of each.
2. What conditions favor, and what conditions prevent putrefaction in dead bodies?
3. Describe briefly but clearly two tests for sugar in the urine.
4. Describe the qualitative and quantitative determination of free hydrochloric acid in gastric content.
5. Illustrate the difference between analytic and synthetic methods in chemistry.

BACTERIOLOGY, PATHOLOGY and HYGIENE

1. How would you collect and examine urine for detection of the tubercle bacillus?
2. What is a vaccine? For what purposes are they used? Name three diseases in which they are effectual.
3. Name the organism most commonly found in (a) furuncle (b) puerperal sepsis (c) erysipelas (d) urethritis (e) rectal abscess.
4. How would you detect blood in the stools? Name four possible causes.
5. Discuss gangrene of the leg, causes and results.
6. Discuss embolism of the lung, causes and results.
7. Describe the formation of gall-stones and name possible results.
8. Discuss hypertrophy of the heart, causes and results.
9. Discuss the use of chemical substances and fumigation in contagious diseases, and name some of the agents employed.

10. How are communicable diseases dis-seminated? State specific precautions to be advised against poliomyelitis, diphtheria, undulant fever.

PHYSIOLOGY

1. Describe a peptic gland. Make a drawing.
2. Locate the respiratory center.
3. What is the myogenic theory of the heart's activity?
4. What experiments have been made to prove the glycogenic function of the liver?
5. Give a physiologic explanation of:
   (a) Sleep
   (b) Dreams.
6. What effect does an excessive starchy diet produce?
7. State the function of the anterior spinal nerve-roots. How is the function proved?
8. Describe the function of the mucous membrane of the respiratory tract.
9. Describe the following terms:
   (a) Auricular venous pulse
   (b) Ventricular or nodal venous pulse
   (c) Ventricular rhythm.
10. Describe the vermicular movement of the stomach and intestines. What purpose does this movement serve?

ANATOMY

1. How is the superior vena cava formed? Give length and portion of the body drained by it. Where does it enter the heart?
2. Describe the lymphatic system and discuss function.
3. Give superficial and deep origin and distribution of the third cranial nerve. Through what fissure does it leave the skull?
4. Describe the frontal bone. Name the muscles arising from it and bones it articulates with.
5. Give origin, insertion, action and nerve supply of the longissimus dorsi muscle.

DIAGNOSIS

1. Differentiate between diverticulitis and carcinoma of the sigmoid in its upper third.
2. A child is brought in as an emergency clutching its throat, mouth open, chin extended, respiration extremely difficult, deep cyanosis and coughing. Give a tentative diagnosis.
3. Differentiate between a case of chicken pox and a mild case of smallpox; give probable leucocyte count.
4. A woman enters the hospital unconscious with no history obtainable, enumerate the possibilities as causes for her condition.
5. Name the various causes of glycosuria. Discuss their differentiation. Give briefly their importance as to prognosis.
6. State the causes of psittacosis, tularemia and rat bite fever. Differentiate between the first two named.
7. Discuss the general characteristics of sarcoma and carcinoma, related causes of onset, period of life affected and give prognosis.
8. A new born babe cries frequently, vomits almost continually, there is occasional twitching of arms and legs and the extremities show slight rigidity upon handling. How would you proceed to make a diagnosis and what would you consider in arriving at the same?
9. What signs and symptoms would lead you to suspect a deficiency in secretion of the following glands: (a) pituitary (b) parathyroid (c) suprarenals.
10. Give the color of the spinal fluid in the following:
   (a) tubercular and epidemic meningitis
   (b) cord tumor with occlusion of canal
   (c) fracture of the base of the skull.

OBSTETRICS

1. Discuss the value and danger of the use of pituitrin in obstetrics.
2. When does labor, starting with child in an obliquely posterior position (ROP) or (LOP) become serious? Give management of same.
3. Make the diagnosis and outline treatment of placenta praevia with a viable child.
4. Name the conditions that should be fulfilled before a forceps operation is attempted.
5. Discuss the employment of abdominal palpation. Discuss rectal and vaginal examinations in obstetrics.

SURGERY

1. A patient enters the hospital with the history of a fall from a horse striking the ground on his abdomen. Examination reveals marked tenderness, pain and rigidity in left hypochondriac region, rapid pulse, air hunger, thirst, restlessness, leucocyte count 35,000. Make a tentative diagnosis; briefly differentiate from other possible conditions; outline treatment.
2. In comminuted fracture of the ulna and radius at elbow joint outline treatment as to type, time and method of fixation and treatment following removal of fixation.
3. Give a patient 45 years of age with history of recent tonsillectomy fluctuating temperature, dyspnoea, pain in lower right chest, increased pulse and respiration, dry unproductive cough, make a diagnosis and outline treatment.
4. A patient examined by you reveals bitemporal hemianopsia, edema of optic disc, decrease of vision three diopters, constant headaches; what is your diagnosis and treatment?
5. Differentiate between acute appendicitis, ruptured ectopic pregnancy and ruptured pus tube on right side.
6. Give three types of gangrene with their causes and outline treatment of two of them.
7. What surgical conditions of the bowel warrant a resection? How do you distinguish between large and small intestine?
8. Describe treatment for fracture of lower jaw.
9. Make differential diagnosis of renal colic on right side.
10. How would you minimize scar tension in breast amputation?

SPECIALTIES

1. Name and describe the coats of the eye ball.
2. Mrs. G., aged 56 has the following symptoms:
   (1) gradual diminishing of visual acuity
   (b) narrowing of visual field
   (3) cupped disc
   (4) slightly increased tension.

   Give diagnosis and treatment.
3. Give symptoms and treatment of Vincent's angina.
4. What is the difference between intubation and tracheotomy? Describe intubation.
5. Describe the physiology of hearing.

HOMEOPATHIC MATERIA MEDICA

1. What are the gastric symptoms of anacardium?
2. Define the following: "Objective symptom", "elective affinity", "nosode".
3. Give the cough symptoms of causticum, rumex crispus.
4. Give five characteristic symptoms of pulsatilla.
5. Give indications for glonoin, spareteine sulphate and strophanthus in heart disease.
6. Write what you know about the use of fluoric acid.
7. Where is capsicum indicated in ear disease?
8. What indications call for hyoscyamus in typhoid?
9. Name and give indications for five remedies used for headache.
10. What are the chest symptoms of stannum metalicum?

New Narcotic Legislation

The Federal Narcotic Service Reorganization Bill, H. R. 11143, introduced by Representative Porter, Pennsylvania, has been passed by both houses of Congress and sent to President Hoover for his consideration.

The principal provision of the measure is that it establishes a Narcotic Bureau in the Treasury Department to be headed by a commissioner appointed by the President with the advice and consent of the Senate. All functions heretofore performed under the direction of a subordinate officer of the Bureau of Prohibition are transferred to the new bureau. It also provides that the functions performed under the narcotic drugs import and export act by the Federal Narcotic Control Board be transferred to the new bureau.

As amended the measure provides that the Secretary of the Treasury cooperate with the several states in suppression of the abuse of narcotic drugs in their respective jurisdictions.

The United States Civil Service Commission has announced that physicians are needed at the following establishments of the United States Indian Service: Cheyenne River Agency, South Dakota; Jicarilla Agency, New Mexico; Theodore Roosevelt Indian School, Arizona; Consolidated Ute Agency, Colorado; Standing Rock School, North Dakota.

Warning Against Swindlers, Fraudulent Collecting Scheme, et cetera

Promoters of worthless collection schemes and of numerous other skin-games, designed especially to fleece members of the medical profession, seem to find Summer a fertile time of year for their rackets.

Several salesmen of fraudulent collection propositions are now floating about Ohio. Reports indicate that more than one physician has nibbled and been left high and dry after drowning hook, line and sinker.

One racket which is reported to be proving quite lucrative (for its promoters) is still another type of collection scheme. The operations of that agency, which bears an imposing title, are as follows:

A suave and glib salesman drops into a physician's office, usually at a busy time, flashes a nationally-known credit rating book, points out that his company is therein listed and proceeds with a very convincing line of talk about how badly his firm wants to help the doctor collect his poor accounts. The agent proposes to collect these bad accounts on a fifty-fifty basis for the first $100 and 25 per cent on each $100 thereafter.

This sounds fine to the busy physician and he falls for the sales talk, turns over to the collector his bad accounts and signs a contract.

Everything looks rosy until the physician takes the time to read his contract carefully. Then he makes the startling discovery that all is not well. He finds that under the contract which he has signed the collection agency gets 50 per cent of *not* the first $100 collected but 50 per cent of the first $100 *placed for collection*. Also that the collection agency gets 25 per cent of *not* each succeeding $100 collected but 25 per cent of each succeeding $100 *placed for collection*. For instance, if a physician gives this company $1000 in accounts to collect, the company under its contract gets $50 on the first $100 *placed for collection* and $25 on each $100 of the remaining $900 *placed for collection*, which means that the outfit gets $275 whether it collects a cent. Furthermore the physician finds that he cannot recall the accounts that he has legally assigned to the agency.

The scheme is quite different from the one which the physician, in his haste, believed he was ascribing to and several who have been taken in have even been raked over the coals by the firm's collector because the physician included in his list of accounts dead-beats and debtors of unknown address.

Another collection scheme, somewhat aged but a fairly good game for imposters, has been revived and is now being worked. This racket is the one where the salesman promises immediate results on a 10 per cent commission basis. The doctor furnishes a list of accounts and signs a contract. Later the physician finds he has bound himself to a contract which makes him indebted to the agency for 50 cents for each name as a "docket fee".

Imposters also continue to use the old skin-game of getting from a physician a list of delinquent accounts, collecting what they can from the list and skipping town without making an adjustment with the physician. Naturally the "company" which they claimed to represent never existed.

The installment collection game, too, is still employed. This fraud is the one where an agency makes arrangements for payment of delinquent accounts on the physician's books on an installment basis, the first installment, if it does not exceed the agency's commission, all to go to the collectors. Of course the collectors make little if any efforts to collect in amounts exceeding their commission and as a result the physician receives no payment on his bills which are thus reduced in the amount which the collectors had pocketed.

These are but typical examples of the numerous and varied fraudulent collection schemes designed especially for gullible physicians. There are others, as well as numerous rackets for fleecing physicians through membership in fly-by-night organizations, investments in watered stocks, subscriptions to magazines by unauthorized representatives and sale of worthless medical and surgical supplies.

The physician should be constantly on guard against these imposters. He should maintain a "show me" attitude and should by all means investigate before he invests in any dealings where money is involved. Credentials of all salesmen or solicitors should be examined carefully and verified. Checks, contracts and documents presented by strangers always should be investigated.

Several county medical societies in Ohio have aligned themselves with local merchants' credit rating bureaus in the matter of minimizing bad accounts and in securing aid in collections.

All physicians would do well to heed the advice of Dr. William C. Woodward, director of the Bureau of Legal Medicine of the American Medical Association, in the matter of business relationships with collection bureaus and similar agencies. Dr. Woodward's warning may be summed up as follows:

1. Always obtain competent legal advice before entering into a contract.

2. Know your collector's moral and financial responsibility.

3. Study the collection contract and sign it personally.

4. Refer all collection strangers to the Academy of Medicine, County Medical Society or Better Business Bureau.

The use of authentic and well-meaning collection agencies by members of the medical pro-

fession should not be discouraged. Naturally, there are some collection agencies to which physicians can entrust their bills. However, physicians should pick their agents carefully and should always take every precaution in checking up on the reputation of individuals or agencies engaged in this kind of work.

All members of the State Association should read the article on "Collection Agencies" published in the April 5, 1930, issue of the *A. M. A. Journal*, pages 1086-1087, which reveals how many fraudulent collection agencies operate and contains the advice of the A. M. A. Bureau of Investigation to physicians in choosing agencies to handle financial matters for them.

New National Institute of Health

A bill providing for creation of a national institute of health in Washington, D. C., under the auspices of the United States Public Health Service, passed by both houses of Congress, has been signed by President Hoover.

The measure authorizes an initial appropriation of $750,000 for the construction and equipment of buildings and the Secretary of the Treasury is authorized to accept donations for use in ascertaining the cause, prevention and cure of diseases affecting human beings. The act also provides for establishment of research fellowships within the institute, the scientists to work both in this country and abroad. It also provides that gifts of more than $500,000 are to be recognized by memorials within the buildings.

The Senate Committee on Commerce which recommended the bill to the Senate stated in its report "that the object of the bill is to promote the health of human beings, to improve their earning capacity, to reduce their living expenses, to increase their happiness and to prolong their lives; that it is designed to prevent disease by ascertaining its cause."

In a recent radio address, Senator Ransdell, Louisiana, author of the measure, discussed some of the phases of the legislation.

"The most important feature of the bill", Senator Ransdell declared, "is the provision for fellowships, which would be in the nature of chairs, as those chairs are found in institutions. The most valuable asset of the people of the country is brains. There are young men, who, by reason of lack of finances and lack of encouragement, and the inaccessibility of a scientific environment in which to develop, have fallen by the wayside. The purpose of a measure of this kind is to have potentially available a provision whereby a young man could be aided, not for a few days or a few weeks to finish his education, but to aid him after he has graduated, providing he is an extraordinary student.

"To those of you, who, like myself, are advocates of the principle of states' rights, let me say that under my bill no new bureau of the government is contemplated. The institute simply enlarges and broadens the scope of the work now being done by the United States Public Health Service. The health activities of individuals, medical schools, hospitals, scientific institutions and state departments of health will not be interfered with, but on the contrary, aided materially by the institute."

Child Health Conference Figures

Good health in its relation to economic conditions and the standards of living in the United States, aside from the immeasurable feelings of satisfaction to the individual in being well, has an economic value of impressive significance, the editor of the White House Conference on Child Health and Protection, Mrs. William Atherton Du Puy, stated orally in behalf of the conference recently.

It is estimated that a boy baby at birth, coming into a family whose annual income is $2,500, has an economic value amounting to $9,333, which increases progressively to $28,654 by the time he is 18 years of age, Mrs. Du Puy said.

The statistics, submitted by the Metropolitan Life Insurance Company, of New York, on the value of human life at all ages, are estimated in connection with the cost of rearing a child in a family with an annual income of $2,500 to the age of 18 years, which is set at $7,238. The value of the child at birth is the amount which it would be necessary to put out at interest at 3½ per cent to rear the child to 18 years and to produce the net income he is expected to earn throughout the working period of his life, Mrs. Du Puy explained.

Taking the same family income as a basis and using the value of a man at each year of his age from birth to 18 years, it was found by the insurance company that the aggregate value for the male population of the whole United State's amount to $1,144,000,000,000, she pointed out.

No information is available upon the economic value of a woman since most women are housewives, hence no estimate can be made upon their economic worth in dollars and cents, it was explained. However, Mrs. Du Puy called attention to an estimate suggested by the Metropolitan Insurance Company as one-half that of the man, thus making a total value of our vital assets more than $1,700,000,000,000.

Mrs. Du Puy also called attention to the fact that the value of human life in the United States when compared with the estimated material wealth of the country is five times greater.

The following figures, as submitted to the White House Conference, present the value of a boy reared to the age of 18 years within the $2,500 income class:

Birth, $9,333; 1 year, $10,350; 2 years, $11,250; 3 years, $12,200; 4 years, $13,150; 5 years, $14,156; 6 years, $15,050; 7 years, $16,000; 8 years, $16,950; 9 years, $18,000; 10 years, $19,078; 11

years, $20,250; 12 years, $21,500; 13 years, $22,800; 14 years, $24,150; 15 years, $25,341; 16 years, $26,600; 17 years, $27,700; 18 years, $28,654.

New Administrative Set-Up Governing Medicinal Liquor

What changes in the administrative set-up in Ohio for the enforcement of the National Prohibition Act will be ordered and what new regulations—if any—will be promulgated as a result of the enactment of the Williamson Bill transferring prohibition enforcement from the Treasury Department to the Department of Justice, have not been announced by the authorities at Washington.

The reorganization act, sponsored by Representative Williamson of South Dakota, was signed by President Hoover on May 27 and becomes effective July 1.

The act provides for a Bureau of Prohibition in the Department of Justice with a director of prohibition, to be appointed by the Attorney General, at its head, and for the transfer of all attorneys, officers and employes of the present enforcement division of the Prohibition Bureau in the Treasury Department to the Prohibition Bureau of the Department of Justice.

It also provides that the Attorney General and the Secretary of the Treasury jointly shall prescribe all regulations under the National Prohibition Act. The act specifies that the present Bureau of Prohibition in the Treasury Department shall hereafter be known as the Bureau of Industrial Alcohol and that the Commissioner of Prohibition in the Treasury Department shall hereafter have the title of Commissioner of Industrial Alcohol.

Officials state that while the act gives the two departments joint control in the matter of granting permits for industrial alcohol and medicinal liquor and alcohol, that in all probability only 10 to 15 per cent of the applications would ever reach the Attorney General, these being segregated cases where there may be sufficient suspicion to warrant the Department of Justice's consideration. In all the rest of the cases, it has been said, the granting of permits for all purposes would be as at present—handled by the Treasury Department.

In a published interview following the enactment of the measure, Attorney General Mitchell stated that his Department had for some time been studying details of administration, personnel and operation of the new unit, but had not as yet reached any final conclusions. He also explained that the matter of coordination between the detection and prosecuting branches of the service, both in Washington and throughout the country, had been discussed and that undoubtedly some changes in the present set-up, especially in the matter of redistricting the country, would be made. He indicated that it is more likely that there would be an increase in districts rather than that the number would be lessened. Divorcing of the district offices in charge of enforcement and the offices in charge of the granting of permits also has been discussed, according to Mr. Mitchell, but no decision has as yet been reached.

There has been no indication of any contemplated changes in the regulations governing the purchase, possession, transportation and use of medicinal liquor and alcohol by physicians and hospitals for lawful, professional medical, surgical and laboratory purposes, although the Williamson Act gives the Attorney General and the Secretary of the Treasury joint authority to prescribe all regulations for administration and enforcement of the National Prohibition Act. The Williamson Act itself does not propose any change in the present privileges granted physicians and hospitals, but leaves this matter entirely in the hands of the two departmental heads.

New System of Medical Service in U. S. Penal Institutions

Control of medical work in the federal prisons of the country has been turned over to the U. S. Public Health Service at the request of the Attorney General, according to a recent announcement by Dr. Walter L. Treadway, assistant surgeon general, who is to have charge of this new undertaking by the federal health service.

One of the first acts of the Public Health Service, according to Dr. Treadway, will be to supplement some of the existing medical staffs at the various prisons with officers of the service.

The reason given by officials of the Public Health Service for this sudden change in the present system is that there has been general dissatisfaction with existing medical services in the federal prisons, due mostly to the fact that much of the work was being done on a part-time basis and that the services of first-class physicians could not be procured because of the low compensation paid by the government.

"Apparently no new precedent has been established by the Public Health Service assuming this new responsibility, for it is another step in helping to coordinate and promote uniformity in the medical work of the Federal Government, a policy that is in keeping with this and previous administrations", Dr. Treadway is quoted as having declared.

Dr. Treadway appears to be correct in his opinion as to this further extension of state medicine being "no new precedent", judging from experiences of the past few years during which time the Federal Government has been gradually broadening and expanding its medical service in competition with the private, individual practitioner of medicine.

Dr. Treadway, however, is probably in error when he states that one of the first acts of the Public Health Service will be to supplement existing prison medical staffs with officers of the service. What he probably intended to say was that one of the first acts of the service would be to supplant existing prison staffs with officers of the service. At any rate, the chances are that before many months physicians who have been employed to render medical services to inmates of the federal prisons will have been displaced by members of the Public Health Service.

Whether this new policy of the Federal Government will result in more efficient and better medical service for inmates of the federal prisons is the real question. Whether the salaried members of the Public Health Service are more competent than the doctors who have been doing part-time work at the penal institutions is also a question. That the Federal Government seems to be definitely launched on a policy of strengthening and extending its present extensive system of state medicine is quite apparent. The end is not yet and the final results most indefinite.

Thorough Examination and Prompt Treatment of Industrial Injuries

The value of efficient first-aid treatment and accurate diagnosis of injuries arising from accidents in industry cannot be over-emphasized, according to authorities in close touch with the various campaigns being waged to cut down Ohio's annual toll of industrial accidents.

That neglected injuries prove costly in nine cases out of ten is a statistical fact and involves a factor which has made the work of curtailing death and permanent total disability among industrial employes extremely difficult.

Indifference or carelessness in the matter of first aid is said to be far too frequent in Ohio industries. Some employers are failing to provide adequate facilities for prompt first-aid treatment. Records show that far too many employes are willfully or innocently minimizing the danger of neglected minor cuts and scratches.

It also has been charged that some physicians are not exercising the proper amount of caution and efficiency in rendering first-aid attention to injured wage-earners.

In a recent issue of the *Ohio Industrial Commission Monitor*, an editorial written by Thomas P. Kearns, superintendent of the Division of Safety and Hygiene, pointed out that very little appreciable gain is being made in the campaign against infections in industrial accidents despite the emphasis that has been placed on the subject.

"Many cases coming before the Industrial Commission have convinced the members of that body that considerable saving to the state fund and a greater conservation of the normal earning capacity of workers could be affected by more careful medical attention to injuries arising from accidents in industry", stated Mr. Kearns.

"Investigations conducted in many cases under direction of the commission," he added, "result in information disclosing the fact that incomplete and not infrequently, incompetent medical attention has resulted in the prolonging of terms of disability of applicants and in some cases of permanent evil results due to careless medical services.

"At the risk of being accused of repetition, we again desire to emphasize the extreme importance of prompt and efficient first-aid to even the most trivial injuries, since even the slightest mishap is potentially a major one. Especial attention is directed to the necessity of giving the highest degree of service in the case of fractures and a thorough examination of all accident victims for injuries of this nature.

"We have in mind a number of instances where a cursory examination of the patients resulted in overlooking injuries of a character that eventually proved more serious than those for which the patients were treated. In these cases it would appear that the attending physician did not deem it necessary to look farther than the visible injuries and as a result the state funds were subjected to a drain that could have been obviated by a really thorough physical examination at the outset.

"Frequent stress has been placed upon the utmost importance of a thorough medical history of every case being available at the time the claim is filed, yet cases in which this initial information has been overlooked are continually coming to the attention of the commission. Not only the employer, but the applicant as well, should insist on an examination so thorough that there will remain no possibility of overlooking latent injuries which eventually will develop to embarrass the claimant, the employer and the commission.

"Even leaving out of consideration the probability of an injured worker being left with a physical defect that will seriously handicap him in his quest for a livelihood, economic prudence demands that every victim of an industrial accident receive the best of medical attention in order that his true physical condition may be known and that he may not be the victim of complications due to oversight or incompetence."

The present campaign to bring industrial accidents to a minimum will be of little avail unless employers, employes and physicians doing industrial work unite in a concerted effort to reduce the toll being taken by the neglected or minor injury. Carelessness on the part of any one of the three groups interested is certain to detract from the efficiency of new efforts to produce a spirit of careful watchfulness of even trivial injuries.

The John Phillips Memorial Prize

The American College of Physicians has established the John Phillips Memorial Prize of $1500, to be awarded for the most meritorious contribution in internal medicine and sciences contributing thereto.

The prize was founded in memory of the late Dr. John Phillips, Cleveland, who met his death in the Cleveland Clinic disaster and was one of the outstanding physicians of the nation at the time of his death. He had been a regent of the American College of Physicians for many years and had always been vitally interested in stimulating medical research.

All contributions must be mailed to Dr. E. R. Loveland, executive secretary of the American College of Physicians, 133-135 S. Thirty-Sixth Street, Philadelphia, on or before August 31, 1930.

The following conditions have been drafted to govern the contest:

The contributions must be submitted in the form of a thesis or dissertation based upon published or unpublished original work.

The thesis or dissertation must be in the English language, in triplicate, in typewritten or printed form, and the work upon which it is based must have been done in whole or in part in the United States or Canada.

The recipient of the prize would be expected to read the essay at the next annual meeting of the College, after which he would be officially presented with the prize by the President.

The College reserves the right to make no award of the prize if a sufficiently meritorious piece of work has not been received.

The announcement of the prize winner will be made not later than two months before the annual meeting.

Eclectic Medical Meeting Held in Columbus

Annual meeting of the National Eclectic Medical Association was held at the Deshler-Wallick Hotel, Columbus, June 17-20.

Arrangements and entertainment for the meeting were in charge of the following committee of Ohio physicians: R. B. Taylor, Columbus; W. A. Stoutenborough, Columbus; A. E. King, Mt. Cory; J. J. Sutter, Lima; W. L. Layport, Cincinnati; M. E. Bowles, Cincinnati, third vice president of the national association; H. G. Brown, Cincinnati; Byron H. Nellans, Cincinnati, and W. N. Mundy, Forest.

A number of Ohio physicians served as section officers, Dr. C. W. Beaman, Cincinnati, as vice chairman of the Section on Practice of Medicine and Pediatrics; Dr. R. M. Pierson, Middletown, second vice chairman of the Section on Surgery; Dr. J. J. Sutter, Lima; chairman of the Section on Preventive Medicine and Specialties; Dr. C. A. Price, Cincinnati, chairman of the Section on Obstetrics and Gynecology.

Among the other Ohio physicians who took part in the meeting were: C. P. McCord, Cincinnati; B. W. Mercer, Tiffin; R. L. Thomas, Cincinnati; E. B. Shewman, Cincinnati; J. B. Alexander, Cincinnati; Z. H. Ballmer, Toledo; H. J. Blood, Middletown; John U. Lloyd, Cincinnati; C. Ross Deeds, Cincinnati; T. D. Hollingsworth, Akron; E. V. Stewart, Cincinnati; R. B. Curl, Toledo; A. Harry Crum, Cincinnati; Fred H. Finlaw, Cincinnati; S. W. Kalb, Cincinnati; C. S. Amidon, Cincinnati; A. W. Ganzel, Cincinnati; B. M. Warne, Cincinnati; E. P. Zeumer, Cincinnati.

Ohio Public Health Association Holds Annual Meeting

Approximately 100 public health and social workers attended the 29th annual meeting of the Ohio Public Health Association, held June 3 at the Deshler-Wallick Hotel, Columbus.

Dr. Kennon Dunham, Cincinnati, was elected president of the association for the ensuing year, succeeding Dr. Robert H. Bishop, Jr., Cleveland.

Other officers elected were: Mrs. A. B. Sharpe, Steubenville, vice president; Mrs. James K. Lyman, Mt. Vernon, vice president, and Dr. J. W. Wilce, Columbus, secretary. Appointed officers for the coming year are: Thomas H. Dickson, Columbus, treasurer; Charles L. LaMonte, Columbus, auditor, and John W. Bricker, Columbus, counsel.

New trustees elected are: Dr. F. G. Barr, Dayton; Dr. C. W. Kirkland, Bellaire; George A. Katzenberger, Greenville; Mrs. R. F. Kohli, Tiffin, Carl Robinson, Lorain; Mrs. Ralph W. Taylor, Painesville; Dr. J. T. Steele, Lisbon; Mrs. M. E. Rathburn, Rutland; Roger Griswold, Ashtabula; Professor James E. Hagerty, Columbus; Dr. A. C. Bachmeyer, Cincinnati; W. H. Dittoe, Youngstown; A. D. Barker, Marietta, and Dr. H. J. Johnson, Tontogany; Dr. J. W. Wilce, Columbus; Mrs. W. H. Kile, Akron; Miss Wanda Przylyska, Columbus; Dr. A. G. Cranch, Cleveland; Dr. B. L. Good, Van Wert, and Dr. Fillmore Young, Marion.

The executive committee is composed of Dr. Dunham, Mrs. Sharpe, Mrs. Lyman, Professor Hagerty, Dr. Bishop, Dr. Barr, Mr. Dittoe, Mrs. Kile and Dr. C. D. Selby.

Governor Myers Y. Cooper made a brief talk at the meeting. Other speakers were Dr. Charles A. Neal, state director of health, and Professor W. W. Charters, director of the bureau of educational research, Ohio State University.

The State Industrial Commission has announced that to date claims totaling $171,416.36 have been paid to victims or heirs of deceased victims of the Cleveland Clinic catastrophe. Death awards have totaled $151,078.00; compensation, $2,879.35, and medical and hospital expenses, $17,459.01.

Novel Idea for Cooperation Between Medicine and the Ministry Advocated by a Columbus Preacher

Attempts to form an alliance between religion and modern scientific medicine in the healing of certain mental cases, whose condition has been properly diagnosed as not due to a pathological ailment but to a state of mind, have been launched on numerous occasions and in scattered localities within the past few years.

Practically all of these movements have met with little or no success because of inefficient and faulty direction, indefinite planning or lack of sustained cooperation.

At the present time, several new programs designed to draw together members of the clergy and the medical profession into a combined movement of scientific and religious treatment of certain classes of sick persons have been drafted and steps have been taken in several instances to actually start the work suggested.

Just how such a cooperative plan of religious and faith healing under the primary guidance of scientific medicine should function has been the subject of much discussion within recent months by members of both professions.

An analysis of many phases of this far-reaching question was made recently before the Columbus Academy of Medicine by Rev. Dr. M. H. Lichliter, pastor of the First Congregational Church, Columbus.

Rev. Dr. Lichliter prefaced his discussion of what he considered the need for cooperation between the clergy and the medical profession in the healing of the sick, by a brief outline of the history of cultism. He asserted that while cults seem to be increasing in number he believed that each is growing at the expense of other cults, due to internal difficulties, and that while scientific medicine is gradually dispersing superstition and the mysticism of cultism, he believes it will be many years, accompanied by hard fighting, before cults will have been entirely defeated.

In approaching the question of how the medical profession and the clergy can arrive at common ground on this particular problem, Dr. Lichliter declared that the clergy could and should assume three things, namely:

That the educational standards of scientific medicine should be maintained at all hazards, since a lowering of these standards would be fatal to the state and nation.

That should the medical profession find itself in need of a housecleaning, members of the profession will see that it is done.

That individual cultists in increasing numbers will call in physicians and surgeons due to better education of the public on and more widespread publicity of the methods and importance of scientific medicine.

"However, it is necessary that we learn a new technique in dealing with the cults and their potential members," he said. "When I say 'we' I mean ministers as well as doctors, for the cults are also growing at the expense of churches.

"We cannot afford to dismiss the question with the term 'Just fools'. We must ask 'Why'. Are persons joining the cults because of something they can obtain there which they cannot get in my church? This is the question I ask myself and I believe one which every physician should ask himself. Medicine must approach this question in some such way."

Rev. Dr. Lichliter declared that the cults appeal especially to two groups of people—sufferers of functional diseases and those who have incurable diseases. He pointed out how the cult sympathizes and expresses an understanding of the neurotic case, adding that in many instances the physician is unwilling to be patient and sympathetic with this group of society.

"We must realize that there *is* something wrong with the neurotic. We must realize that there is a distinction between imaginary diseases and diseases of the imagination. The physician who diagnoses a case as "just nerves" and offers the advice 'snap out of it', or the doctor who hands out a sedative to his neurotic patient does not meet the problem squarely.

"Every physician should realize that in dealing with the neurotic it is worth while to establish a confidence that scientific medicine can meet the condition. The bedside manner is most important. The doctor must learn to talk things over with his patient; establish a belief in scientific medicine, and make the patient understand that his cooperation is quite essential to obtain certain definite results."

The speaker outlined ways utilized by the cults to meet conditions of emotional repression and the various complexes by giving their patients a certain type of literature; certain, definite tasks to perform, and something to occupy their time.

"I wish we could all recognize the value of the 'something to do' method," Dr. Lichliter said. "The 'talking out' cure has been successfully used in numerous cases. Prayer is nothing more than this 'talking out' process. In fact, prayer is a mental catharsis and one of the finest kind of therapeutics for borderline mental cases. Faith is a summons to the will and hope is the release of emotions. All these are emphasized by the cultists with good results. The technique which is employed at the various shrines where faith healing 'miracles' are performed is in the hands of every physician and every minister, but too few employ it."

It is most important that the modern physician and minister keep himself well informed on the new literature in the fields of psychology, as well as physics and chemistry, Dr. Lichliter asserted. He said that revoluntionary changes have been wrought in these fields and that many

of the old theories which were the foundation of the materialistic viewpoint have been overthrown. He suggested that the modern doctor set up a new inquiry and launch a new attack, based on a different assumption than that all things are materialistic.

In conclusion, the Columbus minister suggested the possibility of establishing a "Life Adjustment Clinic" in Columbus, founded on "the most intimate cooperation between the medical profession and the clergy". Under the plan he suggested, no patient would be admitted to the clinic unless sent there by a physician whose advice and counsel would guide the clinic in handling the case. Such a clinic, Dr. Lichliter said would be solely for persons who were free from pathological ailments and in need of a type of mental therapeutics that may be outside the scope of scientific medicine.

Angles to Consider in Relation to Taxes

Those who find themselves concerned as to what revisions may be made in the taxation system of Ohio during the approaching session of the Legislature may find some consolation in studying the predicament in which the British taxpayer finds himself at the present time.

As one writer expresses it, "another somber chapter is being written in English fiscal history" with the presentation to Parliament of a budget, roughly estimated at $4,000,000,000, practically all of which is met by income taxation.

According to one authority, the rates are so graduated that the burden of government falls upon one per cent of the British people, calling for a tax of $1,660 on every earned income of $10,000; $43,190 on an income of $100,000, and $278,190 on an income of $500,000.

Quoting from an analysis made by one source of information:

"These are not tributes exacted by a military conqueror. They are not sacrifices demanded in the name of a grave national emergency. They are the normal compulsory exactions of the British state in time of peace. Their political inspiration may be discovered in the increase in the unemployment roll. Their fundamentally socialistic origin is certified by the extraordinary emphasis on social welfare projects in the British budget."

Despite this excessive financial burden shouldered by only a minute portion of the British people and the vigorous protests which have been voiced, the agitation for extension and elaboration of the various social service schemes responsible for the present situation continues.

Among the more recent matters of legislation presented for the consideration of the British government is that creating a national service scheme, to make available for the individual patient, through the agency of the family physician, a consultation service and all necessary specialist and auxiliary treatment, only, however, for those whose incomes do not exceed $1,250 per annum.

Criticizing this extension of state medicine, one influential London Journal makes the point that "all others, comprising the middle and professional classes and the rich, whether 'idle' or 'industrious' are to go on as before, paying for their medical needs and also paying their share of the scheme".

This same journal declares this as "a serious blot", but adds:

"However, it will be only one more step in our recent socialistic legislation, which consists in taxing ability, thrift and industry for the benefit of those lacking in some or all of these qualities."

A recent survey of social services in Great Britain shows that the cost of social services described as insurance is now almost $800,000,000 per year, to which the beneficiaries contribute about $130,000,000, the employers about $150,000,000 and the balance—$520,000,000—is made up from taxes.

Great Britain has reaped a whirlwind from its seeds of socialistic medicine and other subsidized social service schemes.

It seems unbelievable that the American public will ever let itself be hoodwinked into falling into the trap which has snared the British people.

Careful selection of public officials, especially those entrusted with the responsibility of making new laws and revising existing ones, will go far toward definitely postponing the time when the American taxpayer would find himself the financial "angel" of numerous socialistic and paternalistic programs.

Some Employers Delinquent to Workmen's Compensation Fund

Receiverships for Ohio firms and individuals who are employers of three or more persons and who have failed or refused to participate in the State Insurance Fund provided under the Workmen's Compensation Law may be asked by the State Industrial Commission, according to an announcement made by G. L. Coffinberry, auditor of the Commission.

According to a report recently submitted to the Commission by Dale W. Stump, supervisor of claims, the number of claims filed against employers who are not participating in the State Insurance Fund has increased 22 per cent within the past three months, as compared with the same period a year ago.

It was pointed out in the report that in such claims the awards of the Commission are made against the employer and not the State Insurance Fund, and if unpaid, they are certified to the Attorney General for collection by the institution of civil proceedings.

In claims involving employes of firms or individuals not participating in the state fund,

often the injured claimant or beneficiaries of deceased employes, as well as creditors, such as physicians, nurses, hospitals, etc., must wait months and possibly years while the civil proceedings are being heard by the courts and the compensation is being collected from employers, Mr. Stump pointed out. He also declared that many such employers have been compelled to discontinue business or have been forced into bankruptcy because of the collection of compensation.

In listing some of the cases which have arisen and which are examples of the types of cases the Industrial Commission hopes to eliminate through the institution of receivership suits, Mr. Stump commented as follows:

"Take the case of the employe of an uninsured garage owner. While he was repairing an automobile, a chip of steel struck his left eye and destroyed the sight. Four years ago the Industrial Commission ordered the employer to pay $1875. He resisted payment, fought the case through the courts for three years and finally was compelled to pay the $1875.00 with interest in addition to his attorney fees and court costs. He has spent enough on one claim to pay industrial insurance through a long and active business life.

"You would hardly expect a casualty company to neglect to carry insurance, but the adjuster for such a company was killed when his automobile overturned while he was on his way to the office after adjusting a claim. The Industrial Commission ordered $6500 paid to the widow, also medical and funeral bills amounting to $400. This company now files a receipt every two weeks with the Commission, showing payments according to law. They have paid about $3800.00 and have given bond to pay the remainder in bi-weekly installments.

"A restaurant in Toledo was particularly an unfortunate employer. They had carried insurance for ten years, without an accident. During two months of reorganization, the premium was not paid. In this period an employe cut her hand on a broken goblet. Infection resulted. Some of the fingers were left stiff and the employer paid $300.00 compensation and $75.00 medical expense.

"One would not expect business colleges, teaching as they do the principles of business, to fail to carry insurance for their employes, but three claims have been filed against such schools.

"Perhaps the most pathetic cases as far as employers are concerned are churches and similar organizations. I know of only one death claim filed against a church, but many have been filed for minor injuries. Such organizations seldom have a large surplus in the treasury and the payment of a claim is a real hardship. Any church that has a pastor, secretary and janitor, in other words, three employes, is liable.

"A claim was filed recently against a farmer who regularly employed three or more men. One of them had his arm broken when kicked by a horse. The farmer voluntarily paid $75.00 before the claim was filed. $50.00 was yet due. When it was pointed out he was lucky that the injury was minor, and that he might have been called upon to pay a $6500.00 death claim, he gladly took out insurance."

It was explained by Auditor Coffinberry that in all suits brought against delinquent employers the Industrial Commission is also suing for back premiums. He cited one recent case where the Commission brought suit for an award of $225 and $700 in back premiums.

HOSPITAL NOTES

—Charles E. Findlay, former superintendent of the University Hospital, Columbus, has assumed his new duties as superintendent of the City Hospital, Springfield.

—Plans are under way to enlarge the nurses' home and make other improvements at Mercy Hospital, Columbus.

—Construction work on the new Huron Road Hospital, Cleveland, will be started soon. A fund of $875,000 was raised to erect the institution.

—The nurses' training school at Jane Case Hospital, Delaware, has been discontinued in order to curtail operating expenses of the hospital.

—Frank W. Hoover, superintendent of the Alliance City Hospital, was inaugurated as president of the Ohio State Hospital Association at its recent annual meeting in Cincinnati. Officers elected for the ensuing year were: J. E. Ranson, Toledo, president-elect; Miss Elizabeth Pierce, Cincinnati, vice president; J. R. Mannix, Elyria, secretary; Rev. M. F. Griffin, Youngstown, treasurer, and Miss Dessa Shaw, Piqua, trustee. The 1931 meeting of the association will be held in Cleveland.

—Dr. B. F. Cain, originator of the campaign for a new Western Hills Hospital, Cincinnati, has been elected president of the hospital association which will carry on the project. Other officers are: First vice president, Dr. Charles T. Souther; second vice president, Dr. E. H. Smith; third vice president, Dr. S. William Kolb; secretary, Dr. Joseph A. Conner; treasurer, Dr. M. E. Bowles; members of supervising board, Drs. D. C. Handley, Charles W. Beaman, E. H. Moore, Clifford Sater, J. L. Payne, M. E. Wilkes, and David Weaver.

—Dr. Eugene B. Pierce, formerly health director in the Flint, Michigan, public schools, has been chosen superintendent of the Molly Stark Tuberculosis Sanitarium, Canton, succeeding Dr. Herbert O. Black, resigned.

—A bequest of $1134 from the estate of the late Margaret Goodrich to the Norwalk Memorial Hospital has been announced.

—Electors of Fayette County must vote again on a bond issue for a new county hospital. The Ohio Supreme Court recently annulled a bond issue for $100,000 for that purpose by refusing a writ of mandamus against the Fayette County Commissioners who had refused to issue the bonds on the grounds that no notice of election had been given as required by law. The court held such a notice was mandatory under the uniform bond act.

Deaths in Ohio

Daniel B. Aldrich, M.D., Ashtabula; Western Reserve University School of Medicine, 1889; aged 68; member of the Ohio State Medical Association and the American Medical Association; died June 2 of coronary thrombosis. Dr. Aldrich had practiced in Ashtabula since his graduation. Surviving are his widow, two sons and three daughters.

Robert Young Cox, M.D., Cleveland; University of Texas, School of Medicine, Galveston, 1926; aged 29; died suddenly on May 2 while taking a gas anesthesia for removal of two teeth. Dr. Cox served his internship at the Cleveland City Hospital, following which he served as resident in dermatology and syphilology at Lakeside Hospital. During the past year he had been connected with the Western Reserve University School of Medicine.

George W. Foltz, M.D., North Baltimore; Starling Medical College, Columbus, 1896; aged 73; member of the Ohio State Medical Association, and Fellow of the American Medical Association; died June 3. Dr. Foltz had practiced for 33 years in North Baltimore, before retiring a few years ago. He is survived by his son, Dr. E. B. Foltz, of North Baltimore.

Curtis L. Fox, M.D., Kingsville; Western Reserve University, School of Medicine, Cleveland, 1881; aged 73; member of the Ohio State Medical Association, and the American Medical Association; died May 20 of coronary thrombosis. Dr. Fox had practiced in Kingsville since his graduation. He is survived by his widow, two daughters and one son.

Albert B. Fraze, M.D., Mark Center; Cleveland College of Physicians and Surgeons, 1896; aged 60; died April 23. He began practice in Mark Center, and in 1904 located in Toledo, where he practiced until his retirement three years ago. Surviving him are his widow, two brothers and three sisters.

Jacob Fridline, M.D., Ashland; Western Reserve University, School of Medicine, Cleveland, 1896; aged 66; member of the Ohio State Medical Association and the American Medical Association; past president of the Ashland County Medical Society; died May 2 of pneumonia. Dr. Fridline had practiced in Ashland for 32 years, and was a veteran of the World War. He is survived by his widow and one son, who is a Junior in the Boston University School of Medicine.

Charles H. Goodrich, M.D., Sandyville; Western Reserve University, School of Medicine, Cleveland, 1887; aged 76; former member of the Ohio State Medical Association; died May 5. Dr. Goodrich had practiced in Sandyville for 46 years. He is survived by his widow and one son, Dr. C. I. Goodrich, of Dover.

Ashton B. Heyl, M.D., Cincinnati; University of Pennsylvania School of Medicine, Philadelphia, 1888; aged 65; member of the Ohio State Medical Association and Fellow of the American Medical Association; died May 17. Dr. Heyl had practiced in Cincinnati for thirty years. Surviving him are his widow, one son, and one sister.

William E. Loughridge, M.D., Mansfield; Miami Medical College, Cincinnati, 1880; aged 73; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 26. Dr. Loughridge served as an intern at West Penn Hospital, Pittsburgh, and later returned to Mansfield where he continued in active practice until four years ago, when ill health forced him to retire. He is survived by one son and one brother.

Edward J. Martin, M.D., Columbus; Medical College of Ohio, Cincinnati, 1889; aged 62; died May 19 at St. Francis Hospital, of heart disease. He had practiced in Columbus for 26 years. His widow and one son survive him.

Charles S. Means, M.D., Long Beach, California; Columbus Medical College, 1891; Hahnemann Medical College and Hospital of Philadelphia, 1892; aged 65; former member of the Ohio State Medical Association and Fellow of the American Medical Association, and the American College of Surgeons; died June 9 of heart disease. Dr. Means began practice in Columbus in 1893 in association with his brother, the late Dr. William J. Means, and retired in 1924 because of ill health. He formerly was a member of the faculty of Ohio Medical University and Ohio State University School of Medicine, and for fourteen years was a member of the Columbus Board of Education. Surviving him are his widow, a daughter, one son, Dr. Russell G. Means of Columbus; one sister, and two brothers. Dr. J. Warren Means of Troy, and James H. Means of Detroit, Michigan; two nephews, Drs. J. W. and Hugh Means, of Columbus.

Jacob Schwartz, M.D., Cincinnati; Eclectic Medical College, Cincinnati, 1915; aged 47; member of the Ohio State Medical Association and Fellow of the American Medical Association; died April 17 at General Hospital from the effects of self-inflicted injuries. He is survived by his widow and five brothers.

John E. Sheldon, M.D., Columbus; Ohio Medi-

cal University, Columbus, 1902; aged 53; died June 14. Dr. Sheldon practiced for 14 years at Rushville before accepting a position with the Pennsylvania Railroad as assistant medical examiner. He is survived by two daughters and a brother.

W. Stanley Samson, M.D., Columbus; Medical College of Ohio, Cincinnati, 1888; aged 64; died April 26. He had been an invalid for several years.

George Neil Stewart, M.D., Cleveland; University of Edinburgh, Scotland, 1889; aged 70; member of the Ohio State Medical Association; the American Medical Association, and the American Society for Experimental Pathology; professor of experimental medicine, Western Reserve University School of Medicine; died May 28 at Lakeside Hospital. In addition to his degree of Doctor of Medicine, he also received the Master of Arts degree and the Doctor of Science degree at the University of Edinburgh. During 1887-1888, he was senior demonstrator in physiology at Manchester University, and from 1889 to 1893, he was George Henry Lewes student at Cambridge. Following further study in Strassburgh, he became examiner in physiology at Aberdeen. In 1894 he was appointed professor of physiology at Western Reserve University, School of Medicine, remaining until 1903 when he accepted the chair of physiology at the University of Chicago. He returned to Cleveland as director of the H. K. Cushing Laboratory in the School of Medicine of Western Reserve. Dr. Stewart was the author of many papers on physiological subjects, and in 1895 published a manual of physiology which was revised and republished eight times. Surviving him are his widow, one daughter and three sons.

James A. Stephens, M.D., Cleveland; Cleveland University of Medicine and Surgery; 1881; aged 72; died at Cleveland Clinic, April 17. He had practiced in Cleveland for 48 years.

Gilbert J. Toomey, M.D., Cleveland; Western Reserve University, School of Medicine, 1919; aged 37; former member of the Ohio State Medical Association; died May 26 in Bermerhizen, Germany, of scarlet fever, apparently contracted before sailing on May 14, for post graduate study in Germany. Dr. Toomey was a member of the staff of St. John's Hospital, Cleveland. Besides his widow, he is survived by six sons and one daughter.

Thomas E. Walker, M.D., Cleveland; Western Reserve University, School of Medicine, Cleveland, 1915; aged 47; member of the Ohio State Medical Association and Fellow of the American Medical Association; died suddenly of cerebral hemorrhage, May 3, while spending a few months in Alhambra, California. Dr. Walker was a veteran of the World War, and was awarded the British Military Cross for distinguished bravery under fire. He is survived by his widow, his father, and two brothers.

KNOWN IN OHIO

Frank Preston Beaumont, New Cumberland, West Virginia; Eclectic Medical College, Cincinnati, 1887; aged 65; died May 8. Dr. Beaumont had practiced in New Cumberland for 44 years. He is survived by his widow, one daughter, and three sons, one of whom is Dr. D. H. Beaumont, of Wellsville, Ohio.

NEWS NOTES of OHIO

Columbus—Professional colleagues of Dr. L. L. Bigelow former president of the Ohio State Medical Association in 1927-28, and his host of friends throughout Ohio, both in the medical profession and among the laity, regret to learn of his serious illness from hemorrhagic pancreatitis. Dr. Bigelow was stricken on May 30 and underwent an emergency operation at Grant Hospital. Although he is still in a critical condition, a slight change for the better was noted in his condition at the time this issue of *The Journal* went to press.

Troy—Dr. Harry E. Shilling is planning to resume the practice of medicine following a prolonged illness.

Springfield—Dr. Louis L. Syman, for many years an officer in the medical corps, U.S.A., has been retired with the rank of captain.

Loudonville—Dr. J. M. Heyde is on a three-months study and sight-seeing tour of Europe.

Xenia—Dr. Marshall M. Best has been commissioned a first lieutenant in the Medical Reserve Corps.

Grafton—Dr. C. L. Reason, formerly of Green Springs, has opened offices here.

Ravenna—Many men shorten their lives by staying too long at the dinner table, Dr. Joseph N. Weller, Akron, told the members of the local Kiwanis Club at a recent luncheon meeting.

Delaware—Dr. John Edwin Brown, Columbus, and a member of the board of trustees, Ohio Wesleyan University, recently addressed the pre-medical students of the university on the opportunities and demands of the medical profession.

Cincinnati—Alumni Association of Hughes High School elected Dr. E. D. Allgaier president of the organization for the coming year.

Mt. Vernon—Under the terms of the will of the late Dr. Frank C. Larimore, his medical library is bequeathed to the Mt. Vernon Public Library for the use of the members of the Knox County Medical Society and a sum of $10,000 is left the library with which to purchase books for

distribution to the villages and rural districts of the county.

Hamilton—Dr. A. L. Smedley has been appointed physician for the Butler County public institutions.

Jackson—Dr. W. R. Riddell has returned from New York City where he took a short course in roentgenology.

Troy—Sir William Osler's, "The Evolution of Modern Medicine", was reviewed before the Troy Rotary Club by Dr. L. N. Lindenberger.

New Matamoras—Dr. Asia H. Whitacre, intern at Walter Reed Hospital, Washington, D. C., and a graduate of the College of Medicine, Ohio State University, is planning to open offices here.

Hudson—Dr. A. O. DeWeese, physician at the Kent State College, addressed an assembly meeting at the Western Reserve Academy here, on "Religion and Medicine".

Cincinnati—Dr. John E. Greiwe was the principal speaker at St. Xavier College's commencement exercises.

Akron—The marriage of Miss Jane Davidson, daughter of Dr. Harry S. Davidson, Akron, and Dr. Joseph D. Stires, Malvern, has been announced.

Columbus—Dr. Lena P. Holladay, Hillsboro, has been appointed to the medical staff of the State Industrial Commission, filling the vacancy caused by the death of Dr. Richard Kimpton, Columbus.

Ashtabula—Dr. H. R. Graves has been appointed county infirmary physician, succeeding the late Dr. C. L. Fox.

Cleveland—Dr. Clarke Sullivan, Dayton, was inaugurated as president at the 66th annual meeting of the Ohio State Homeopathic Medical Society held in Cleveland. He succeeds Dr. Benjamin B. Kimmel, Cleveland. Dr. George H. Irvin, Orrville, was named president-elect; Dr. J. C. Stratton, Middletown, vice president; Dr. Floyd S. Meck, Cleveland, secretary, and Dr. T. T. Church, Salem, treasurer.

Columbus—Separate commencement exercises were held for members of the graduating class at the College of Medicine, Ohio State University, on Sunday, June 8, since the university's regular commencement exercises were held on June 10, the first day of the mid-summer State Medical Board examinations.

Columbus—Dr. Howard M. Brundage has recovered from injuries received in an automobile accident.

Glendale—Dr. Brack Bowman, graduate of the University of Cincinnati, College of Medicine, and who has been practicing in San Diego, California, has opened offices in the suite occupied by Dr. Rufus Southworth.

Cortland—Dr. W. C. Pontius has been elected surgeon of Warren Post, Veterans of Foreign Wars, succeeding the late Dr. D. E. Hoover.

Cleveland—Dr. G. Richard Russell and Dr. L. P. Harsh, of the Department of Pediatrics, School of Medicine, Western Reserve University, will leave August 1 for a year's study abroad. Dr. Herbert S. Reichle, of the same department, is now studying at the University of Leipsic.

Cleveland—William A. Sommerfield, a junior in the School of Medicine, Western Reserve University, has been awarded the Steuer Memorial Prize for 1930 for his meritorious work in the department of anatomy.

Toledo—Many members of the Toledo medical profession took part in the Diamond Jubilee celebration at St. Vincent's Hospital.

Toledo—A joint meeting of the Detroit and Cleveland Roentgen Ray Societies was held recently at the Inverness Club here, with Dr. John T. Murphy, Toledo, secretary of the American Roentgen Ray Society as host.

Toledo—Drs. L. A. Levison, A. A. Brindley, F. M. Douglass, B. G. Chollett, H. G. Keller and C. Sherwood have returned from a fishing trip through West Virginia.

Toledo—Dr. P. Bruce Brockway has sailed for Europe and will attend the World Health Congress at Dresden, Germany.

Toledo—Dr. C. D. Selby was presented with a trophy by the Lions Club for his high average as a member of the club's bowling team.

Cleveland—Cleveland physicians have been warned through the Cleveland Academy Bulletin to beware of a woman who has been stealing narcotics from physicians' offices while posing as a patient.

Cleveland—Alumni of Western Reserve University, School of Medicine, have launched a campaign for funds to establish a fellowship in clinical medicine in memory of the late Dr. Charles Franklin Hoover. Members of the executive committee for the campaign are: Drs. George W. Crile, H. D. Piercy, Frank S. Gibson, M. A. Blankenhorn and F. C. Oldenburg.

Cleveland—Dr. Alexander Miller has been appointed to the School of Aviation Medicine, United States Air Corps, Brooks Field, San Antonio, Texas.

Cleveland—Dr. and Mrs. W. H. Humiston have returned to their home in Willoughby after wintering in Florida.

Cleveland—Dr. and Mrs. A. F. Spurney have returned from a trip abroad.

Cleveland—Dr. Edward Peterka has been ill with streptococcus infection of the leg.

Columbus—Five women were members of the 1930 graduating class at the College of Medicine, Ohio State University. They were Josephine Dirion, Cleveland; Beatrice Postle, Columbus; Ruth

Koons, Columbus; Marian Stephens, Cincinnati, and Margaret Brooks, McConnelsville.

Bucyrus—Dr. W. G. Carlisle, city health commissioner, and Dr. G. T. Wasson, Crawford County Commissioner, addressed a recent meeting of the Bucyrus Rotary Club.

Lakewood—Announcement has been made of the marriage of Miss Ruth H. Leary, Cleveland, and Dr. John J. McCarthy, Lakewood.

Warren—Dr. R. N. Herlinger spoke on the "Treatment and Tendencies of Modern Medicine" at a recent meeting of District No. 3, Ohio State Nurses' Association.

Cleveland—The marriage of Miss Frances Snyder, Elyria, and Dr. J. C. Pickett, Cleveland, has been announced.

Cincinnati—Appointments recently authorized by the Board of Directors of the University of Cincinnati in the College of Medicine were as follows:

Philip Goland, assistant in anatomy; Alfred O'Neil, Davis teaching fellowship; Lewis E. Gilson, instructor in biochemistry; Milford John Boyd, Edwin K. Dunn, Jr., Edgar M. Adams, John Eugene Gregory, assistants in biochemistry; Dr. Johnson McGuire, instructor in medicine and resident physician; Dr. Marget Foulger, Dr. George Burger, Dr. Murray Rich, Dr. Paul Hamilton, Dr. Leon Goldman and Dr. Louis Owens, assistants in medicine and assistant resident physicians; Clifford Smith, Bernard Schmidt, laboratory helper, internal medicine; Dr. Stuart Blitz, Dr. Charlotte Wiedemer, part-time instructors in internal medicine; Dr. Leon Schiff, Seely fellow in medicine; Dr. Robert Hiestand, fellow in medicine; Dr. Pearl M. Zoek, instructor in pathology; Dr. James N. Patterson, Dr. Alfred M. Glaser, Dr. Percy M. Guinand, Dr. John J. Phair, assistants in pathology; Dr. Carl J. Ocha, Dr. William Cook, Dr. J. M. Hayes, assistants in pediatrics; Clyde Dummer, student assistant in pediatrics; Dr. J. V. Goode, Dr. J. R. Conway, Dr. Richard F. Gates, assistants in surgery; Dr. William E. Mathews, clinician in oto-laryngology.

Cincinnati—A memorial gift of $55,000 has been accepted by the Board of Directors of the University of Cincinnati from the family of the late Miss Susie Friedlander, daughter of Dr. Alfred Friedlander, professor of medicine at the College of Medicine, University of Cincinnati. The sum of $40,000 is to be used for a permanent research fund in psychiatry and $15,000 for a permanent fellowship in psychiatry, a subject in which Miss Friedlander was intensely interested.

PUBLIC HEALTH NOTES

—Health education took a prominent place on the program of the National Education Association meeting held in Columbus, June 30 and July 1. Those who addressed the section on Health and Physical Education and their subjects were: Dr. A. M. Kerr, Pittsburgh, "What Should a School Health Service Be?"; Dr. H. J. Stack, New York City, "Safety Education in the Elementary Schools"; Mrs. Rachel Yaw, Cleveland, "An Educational Physical Education Program for the Elementary Schools"; R. G. Paterson, Columbus, "The Need for School Health Education"; Miss Hazel D. Rex, Toledo, "Girls' Athletics"; Miss Bess Goodykoontz, Washington, D. C., "Health and Physical Education, a Vital Value in Education"; Dr. Jay B. Nash, New York City, "A Modern School Physical Education Program"; Professor D. Oberteuffer, Columbus, "Problems in School Health Education and Their Solution."

—In a recent opinion, Attorney General Bettman held that "under the provisions of Section 5851 of the General Code, the county commissioners are authorized to reimburse a person who has been bitten or injured by a dog, cat or other animal afflicted with rabies, the expense of having the animal examined by a veterinarian and sending its head to a laboratory for diagnosis".

—Dr. C. S. Smith, Ada, has been re-appointed a member of the Hardin County Health Board for a term of five years.

—The season of whooping cough's greatest prevalence is at hand, a recent bulletin issued by the State Department of Health warns. During the last 10 years 4642 children have died in Ohio of whooping cough, the Department points out and adds:

"In 1929 there were 225 reported deaths from diphtheria and 149 from scarlet fever, while the deaths from whooping cough numbered 527. It is the only disease in the respiratory group that prevails most abundantly and contributes most largely to the death rate during the spring and summer months, and it is the only communicable disease attacking both sexes which shows a marked and constant preponderance in both incidence and in deaths among girls. The following table shows the deaths by age groups from 1919 to 1929. The data for 1929 are not as yet completed.

Year	All ages	Under 1 year	1 year	2 years	3 years	4 years	Total under 5 years	5 to 9 years	Over 9 years
1919	244	128	68	21	9	6	232	11	1
1920	822	453	186	88	39	15	781	33	8
1921	504	280	112	45	23	12	472	23	9
1922	294	157	74	29	12	4	276	13	5
1923	500	262	133	49	18	12	474	22	4
1924	462	273	111	41	11	10	446	14	2
1925	364	211	100	15	14	6	356	7	1
1926	650	349	158	66	33	15	621	26	3
1927	270	163	51	25	12	7	258	10	2
1928	249	128	71	23	14	6	242	6	1
Total	4359	2404	1064	402	185	93	4158	165	36

"This shows that 95.4 per cent of all deaths from whooping cough are among children under five years of age; 3.7 per cent are in the age group five to nine years, and only .9 per cent of deaths are in individuals over nine years of age.

"55.1 per cent of all deaths are under one year of age.

"54.9 per cent of all deaths are females.

"45.1 per cent of all deaths are males.

"No age is exempt from the possibility of infection, yet, when it is known that 95 per cent of all deaths from whooping cough are in children

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WINTER SALAD *(Six Servings)*

	Grams	Prot.	Fat	Carb.	Cal.
2 teaspoons Knox Sparkling Gelatine	4.5	4	....	....	....
¼ cup cold water	....	....	....	....	....
½ cup hot water	....	....	....	....	....
½ teaspoon salt	....	....	....	....	....
¼ cup vinegar	....	....	....	....	....
1½ cups grated cheese	150	43	54	....	....
½ cup chopped stuffed olives	70	1	19	8	....
½ cup chopped celery	60	1	....	2	....
¼ cup chopped green pepper	25	....	....	1	....
½ cup cream, whipped	75	2	30	2	....
Total		51	103	13	1183
One serving		8.5	17	2	197

Soak gelatine in cold water. Bring water and salt to boil and dissolve gelatine in it. Add vinegar and set aside to chill. When nearly set, beat until frothy, fold in cheese, olives, celery, pepper and whipped cream. Turn into molds and chill until firm. Unmold on lettuce leaf and serve.

SPINACH SALAD *(Six Servings)*

	Grams	Prot.	Fat	Carb.	Cal.
1½ tablespoons Knox Sparkling Gelatine	10	9	....	....	....
¼ cup cold water	....	....	....	....	....
1¼ cups boiling water	....	....	....	....	....
2 tablespoons lemon juice	20	....	....	2	....
½ teaspoon salt	....	....	....	....	....
1½ cups cooked spinach, chopped	300	6	....	7	....
2 hard cooked eggs	100	13	10.5	....	....
Total		28	10.5	9	242.5
One serving		5	2	1.5	40

Soak gelatine in cold water and dissolve in boiling water. Add lemon juice, salt, strain and chill. When nearly set, stir in chopped spinach, mold and chill until firm. Serve on lettuce hearts or tender chicory leaves and garnish with hard cooked egg, cut lengthwise in sixths and sprinkled with paprika. Serve with mayonnaise.

If you agree that recipes like the ones on this page will be helpful in your diabetic practice, write for our complete Diabetic Recipe Book—it contains dozens of valuable recommendations. We shall be glad to mail you as many copies as you desire. Knox Gelatine Laboratories, 4 Knox Ave., Johnstown, N. Y.

Name.....*Address*.....*City*.....*State*.....

under five years of age, one can understand the importance of guarding these little ones from any chance of attack. At school age the danger to life begins to lessen. More than half the cases are in the first two years of life, just at the most helpless period of human existence and when the 'flame of life flickers feeblest'."

—A recent editorial in the *Akron Times-Press* supports the theory that there may be a definite relation between sootfall and deaths from pneumonia. The editorial argues that the higher the soot content of the air, the greater the pneumonia mortality. A chart prepared by City Smoke Inspector Ralph Demary is cited as evidence. It lists eight wards of the city and shows the pneumonia death rate and the sootfall of each, as follows:

Ward	Pneumonia Deaths per 1000 in in 1929	Sootfall April, 1930
Second	1.15	10.97
Sixth	1.11	10.36
Fifth	.84	7.52
Eighth	.68	6.81
Fourth	.56	3.28
First	.48	3.23
Third	.40	3.22
Seventh	.19	2.20

—One of the chief problems facing health departments in the larger cities of the country is that relative to the proper allocation of non-resident deaths, according to Dr. William H. Peters, health commissioner of Cincinnati, writing in the *American Journal of Public Health.*

"The subject is not a new one," Dr. Peters says. "For years and years the statistical section of the American Public Health Association has been grappling with the problem of charging those deaths properly. We all know that the non-resident death shall be credited to the city or subdivision in which it occurs. This rule was established by the Census Bureau, and on the surface, appears to be a good one with the breaks about fifty-fifty; but a glance at tables which have been prepared shows that there is a wide variation in the cities which have been listed.

"In San Francisco, Buffalo, Cleveland, Washington and Cincinnati the location of hospitals, sanatoria and institutions within the corporate limits of the cities undoubtedly has a bearing upon the larger number of non-resident deaths charged to those cities. Then again not a few cities, notably Kansas City, Mo., Buffalo, Cincinnati, Washington and Pittsburgh are metropolitan areas, the hospitals of which draw upon neighboring cities and states. San Francisco, Boston, Cincinnati and Baltimore are centers of medical teaching and this factor may enter the quotient of non-resident deaths. Oddly enough in three cities, Minneapolis, Rochester, and Milwaukee, a good many resident deaths occur in institutions just outside of the city limits. These tend to neutralize to some degree the non-resident deaths in the respective cities. Labor importation and a large lake front apparently account for quite a number of non-resident deaths in Cleveland and Buffalo.

"Quoting Bolduen, we concur that 'when a non-resident dies of an accident there is no question that this should be properly charged to the city as one of its health hazards. Obviously the death of a non-resident following surgical interference or medical treatment in hospitals should not be charged up locally. In other instances an individual investigation should often be necessary to determine whether the death should be charged to the city in which it occurs or to the place of residence'.

"Until we ave reciprocal provision by which deaths of non-residents can be allocated to the area in which they have residence or in which the cause of death was contracted, and this will be a gigantic undertaking, we shall have to be contented with the present regulation."

—The Cincinnati Department of Health in cooperation with the Cincinnati Academy of Medicine has launched another campaign that has for its objective the immunization against diphtheria of another five or ten thousand children of preschool age. Parents are being urged to take their children to their family physicians for toxin antitoxin treatment. Free clinics for those who cannot afford to pay for the treatments have been established at seven branch public libraries. In 1929, 35,000 children under the age of 10 years were immunized, 54 percent of the number having been treated by private practitioners.

—Dr. Charles A. Neal, state director of health, has announced that inspections are being made of tourists' lodging places in the state, checking fire hazards and sanitary conditions. Data obtained by the survey will be used in support of a measure to be presented to the next Legislature providing stringent rules and regulations for such places, Dr. Neal says. He points out that two

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PROMPT AND FULL REPORT

such bills died during the last session of the Legislature due to lack of authentic information to be laid before the committee considering them.

—Dr. Emlyn Jones, chief of the Bureau of Vital Statistics of Pennsylvania, reports that during 1929 not one case of smallpox was contracted within the borders of that state. *The Ohio Health News* makes the pertinent observation that "Pennsylvania has a compulsory vaccination law".

—Dr. C. F. Sisk was re-elected president and Dr. Beatrice Hagan was renamed county health commissioner at a recent reorganization meeting of the Muskingum County Board of Health.

—The Cincinnati Public Library has offered to assist the Cincinnati Board of Health by granting the use of branch library auditoriums for the administration of toxin antitoxin to school children during the summer vacation.

—Dr. John L. Lavan, Toledo health commissioner, has recommended to the Toledo City Council a revision of the city health ordinance. He suggested stricter regulations of restaurants; that all milk sold in the city be tuberculin tested; more stringent rules governing places handling food and meat, and a regulation compelling posting of warning signs by fumigation companies.

News Notes From County Societies and Academies

First District

ACADEMY OF MEDICINE OF CINCINNATI

(Edward King, M.D., Secretary)

May 19—Regular meeting of the Academy at the Chamber of Commerce. Program: "Geographic or Climatic Influence on the Death Rate from Certain Diseases (Diabetes, Pernicious Anaemia and Exophthalmic Goiter)", by Dr. C. A. Mills. Interns' Program: Dr. Meriam Marting, Deaconess Hospital; Dr. Martha Moore, Bethesda Hospital; Dr. Charles Farrell, Good Samaritan Hospital; Dr. Harry Goldstein, Jewish Hospital; Dr. William Cook, General Hospital. Report of Milk Commission.

May 26—Report of Committee on Medical Progress: Dr. C. C. Fihe, Medicine; Dr. Samuel Zielonka, Surgery; Dr. G. Mombach, Obstetrics; Dr. John D. Miller, Gynecology; Dr. V. Fischbach, Ear, Nose and Throat; Dr. Parke G. Smith, Genito-Urinary; Dr. L. K. Felter, Pediatrics; Dr. Howard D. McIntyre, Neurology. Election of officers resulted as follows: President-Elect, Dr. William Doughty; Secretary, Dr. D. T. Vail, Jr.; Treasurer, Dr. M. F. McCarthy; Trustee (three-year term) Dr. T. A. Ratliff; Delegates to State Meeting (three-year term) Drs. Louis Feid, Jr.

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and Charles E. Kiely; alternates, Drs. R. L. Crudgington and E. O. Swartz.—News Clipping.

Clermont County Medical Society met in the school auditorium at Owensville on Wednesday afternoon, May 21. "Practical Points Concerning Nasal Accessory Sinuses" was the subject of a paper presented by Dr. William Mithoefer, of Cincinnati. Dr. Thomas Longworth, president of the Society, gave a report of the recent annual meeting of the State Association, held in Columbus, May 13, 14 and 15.

The June meeting of the Clermont County Medical Society was held at Loveland on Wednesday, June 18, with Drs. Lever and Coleman as hosts. Following a dinner, Dr. W. D. Haines of Cincinnati, gave an interesting address on "Pain in the Upper Abdomen".—Program.

Fayette County Medical Society met in regular session at the Y. M. C. A., Washington C. H., on Thursday afternoon, June 5, with eleven members present. Following a discussion of collection of accounts, Dr. Philip J. Reel of Columbus, gave a very instructive and interesting talk on "Surgical Management of Fibroids", illustrated by lantern slides. Dr. Reel's talk showed much thought and careful preparation, and was ably presented.—James F. Wilson, Secretary.

Second District

Clark County Medical Society held its last luncheon meeting of the season on Wednesday, May 28, at Hotel Shawnee, Springfield, with 30 members in attendance. Dr. J. E. Griewe, professor emeritus of the medical school of the University of Cincinnati, gave a lecture on "Interpretation of the Electrocardiogram and the Peripheral Circulation", which was illustrated with lantern slides. The Society adopted a resolution expressing regret on the death of Dr. J. J. Moore, of South Charleston, a former president. Members will meet again in regular session in October.—News Clipping.

Miami County Medical Society held a joint meeting with the Shelby County Medical Society, at the Sidney Country Club on Thursday, June 5. The session opened with a luncheon at 11 o'clock, with the Shelby County members as hosts. Dr. M. F. Hussey, president of the Shelby County Society, presided. Dr. E. M. Huston, Dayton, Councilor of the Second District, spoke on "Advance of Medical Science During the Last Decade".—News Clipping.

Montgomery County Medical Society held its regular meeting on Friday evening, May 16, at the Fidelity Medical Building, Dayton. "Artificial Light and its Relation to the Medical Profession" was the subject of an address by Dr. Paul Luckenbach, of the General Electric Company. Nomi-

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nations of officers for the coming year were presented.

The final meeting of the Society for this year was held at the Old Barn club, on Friday evening, June 6. Following a dinner at 6:30, Major M. C. Grow, Fairfield Air Depot, who served from 1915 to 1917 with the Imperial Army, spoke on "Outline of Medical Service in the Russian Army during the World War". His address was illustrated with a number of interesting pictures. Officers elected for the coming year, are: President, Dr. H. H. Herman; first vice president, Dr. E. W. Shank; second vice president, Dr. C. E. Shepherd; delegates to state meeting, Dr. C. C. McLean (three-year term), Dr. A. W. Carley (one-year term) and Dr. W. B. Bryant, alternate; board of censors, Dr. C. N. Chrisman (three-year term); milk commission, Drs. C. C. Payne and Walter M. Simpson; legislative committeeman, Dr. Webster S. Smith. Miss Mildred Jeffrey is executive secretary and treasurer of the Society.—News Clipping.

Fourth District

TOLEDO ACADEMY OF MEDICINE

(A. P. Hancuff, M.D., Secretary)

June 6—General Meeting, held at the Academy Building, Friday evening, June 6th. Program: "Pseudocyesis" (case report), by Dr. William H. Fisher; "Epicondylitis Humeri" (case report), by Dr. C. D. Selby; "Foreign Body in the Lung" (case report), Harry Dachtler; "Rachitic Pelvis" (case report), by Dr. W. W. Brand; "Report of an Interesting Case for Diagnosis", by Dr. Charles Lukens; "Coronary Thrombosis" (case report), by Dr. N. Worth Brown; "Anaphylaxis from Scarlet Fever Serum", (case report), by Dr. H. E. Smead. Following the program, members enjoyed a buffet supper at the University Club. —Bulletin.

Putnam County Medical Society met at the Dumont Hotel, Ottawa, on Thursday evening, June 5. The essayist, Dr. Paul Stueber, of Lima, in his subject, "The Accessory Sinuses", discussed the anatomical structures and physiological functions of the sinus cavities, and followed with an outline of the pathological difficulties, malformations, infectious growths, and allied diseases. The treatment and management of these parts were discussed from a medical and surgical standpoint. He used pictures and drawings, and a skull to illustrate the anatomical relations. The speaker had his subject well in hand and gave a very thorough presentation. All present were greatly interested and a discussion of many points followed the reading, in which many obscure points were made clear. The subject was one of timely interest and was highly appreciated by those present. Our next meeting will be held in Pandora, on Thursday evening, July 3, with Drs. H. A. Neiswander and P. D. Bixel in charge of the program and arrangements for the evening.—J. R. Echelbarger, Correspondent.

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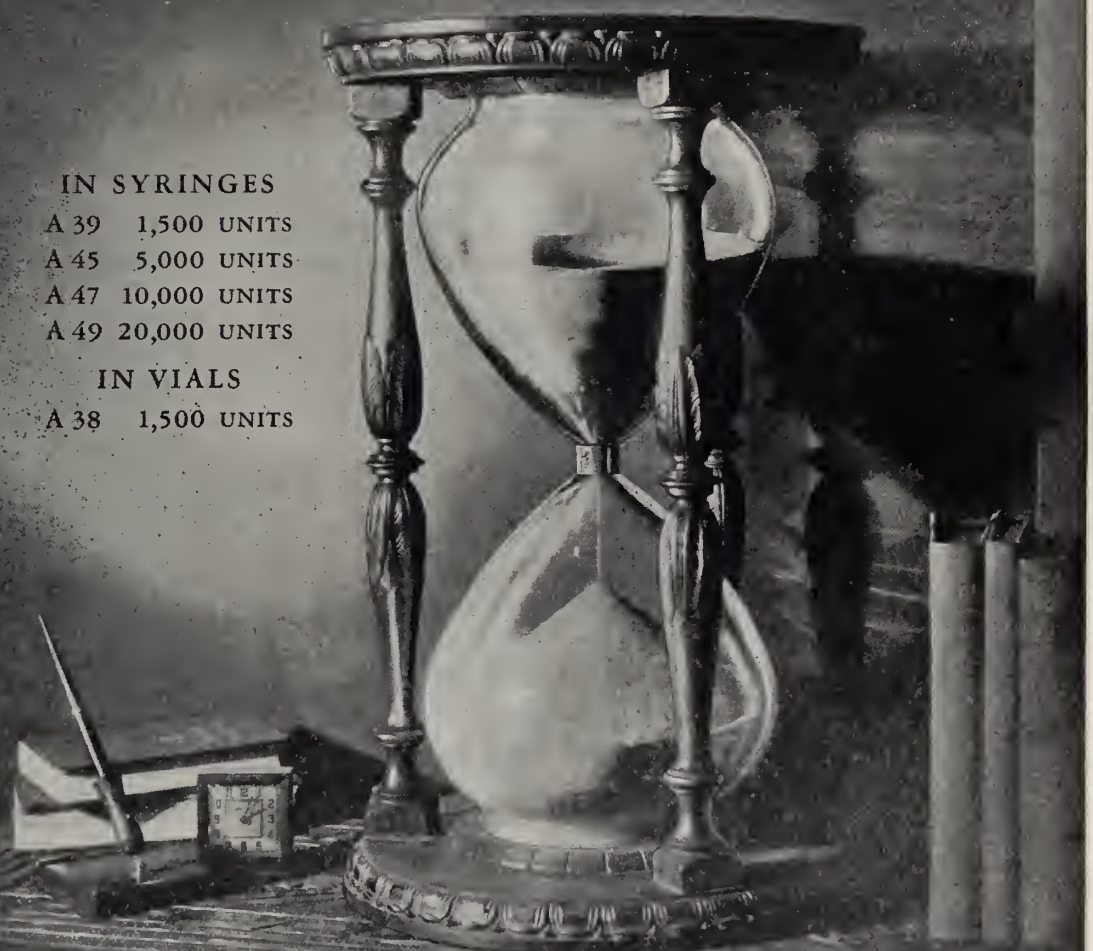
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PROGRESS THROUGH RESEARCH

Wood County Medical Society held a dinner meeting at the Woman's Building, Bowling Green, on Wednesday evening, April 16, followed by an address on "Health Administration and Sanitation", by Dr. Charles A. Neal, State Director of Health.—News Clipping.

Fifth District

Ashtabula County Medical Society met at Hotel Ashtabula, on Tuesday evening, May 27. Following the dinner, the meeting was called to order by the President, Dr. A. J. Pardee. The program was presented by members of the staff of the State Department of Health, who were conducting a county tuberculosis clinic in Ashtabula on May 27 and 28. Dr. E. P. Adams, of the Trumbull Sanatorium, spoke on "Diagnosis". Dr. H. M. Austin presented statistics on clinics conducted, sanitoria in the State, number of active cases of tuberculosis, death rate, etc. Dr. W. D. Tillson spoke on the "Value of Tuberculosis Clinics". Dr. Collins, of New Brunswick, Canada, Sanatorium, spoke on the "Method of Control of Tuberculosis in Canada" as compared with the method used in the United States. It is interesting to note that Dr. Collins is a native of Conneaut. During the war, he located in Canada and now serves as superintendent of the New Brunswick Sanatorium. Dr. Patterson spoke on the requirements of a sanatorium for this county. Following these talks an open discussion was held, and each member of the society was called upon to make some remarks. This was a very interesting and an active meeting.—Wm. Millberg, Secretary.

Lake County Medical Society met in Painesville on Tuesday evening, May 27. Dr. John Holloway, Western Reserve University, Cleveland, read a paper entitled, "Myositis Ossificans". The Society unanimously decided to sponsor the Parent-Teachers' Association pre-school clinics, and to cooperate with the Board of Health in the immunization of children against diphtheria.

On June 9, the attending staff of the Lake County Memorial Hospital, Painesville, held its monthly meeting at the Hospital, the attendance being the largest in recent months. Dr. T. M. Moore, the oldest practicing physician in Lake County, was present and was given a most hearty reception by the members. The following was the program given: Presentation of a case of "Acute Gangrenous Appendicitis in a Woman Aged 73, with Recovery", by Dr. R. H. Spence; presentation of a case of "Paget's Disease", by Dr. M. H. Carmody; presentation of a case of "Bichloride of Mercury Poisoning", by Dr. Burt T. Church; presentation of a case of "Ectopic Pregnancy",

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by Drs. J. V. Winans and E. L. Haffner. The staff voted that their next meeting take the form of a picnic, to be held at the beach.—F. J. Dineen, Secretary.

Lorain County Medical Society held its regular monthly meeting on Tuesday evening, June 10, at the Midway Inn, near Amherst. Following a five o'clock dinner, Dr. S. V. Burley, Lorain, delegate, gave a report of the State Meeting, held in Columbus, May 13, 14 and 15. Dr. Benjamin Carlson, Lorain, presented an illustrated report of "The Brain Tumors", and other case reports were presented by Dr. John Rankin and Dr. W. E. Hart, of Elyria.—Bulletin.

Sixth District

Mahoning County Medical Society held its regular monthly meeting at the Youngstown Club on Tuesday evening, May 27. Dr. Oscar B. Markey, of Mt. Sinai Hospital, Cleveland, spoke on "Functional Disorders of Childhood". The program was followed by a buffet luncheon.

The Third Annual Post Graduate Assembly of the Society was held at Hotel Ohio, Youngstown, on Thursday, June 12, and included a full day of lectures and demonstrations presented by four members of the faculty of Jefferson Medical School. The morning and afternoon sessions were as follows: Dr. Louis H. Clerf—9:30 A. M.—"Bronchoscopy; Its Importance to the General Practitioner"; 2:45 P. M.—'Esophagoscopy and Esophageal Disease". Dr. J. T. Rugh—10:15 A. M.—"Balance and Low Back Pain"; 3:30 P. M.—"The Foot and Shoe Problem". Dr. Elmer H. Funk—11:00 A. M.—"Recent Advances in the Diagnosis and Treatment of Non-Tuberculous Disease of the Lower Respiratory Tract"; Dr. Edward J. Klopp—2:00 P. M.—"Diagnosis of Malignant Growths of the Stomach and Intestines". The evening program included a paper on "Diagnosis and Treatment of Breast Tumors, by Dr. Klopp, and "Some Interesting Problems involved in the Differential Diagnosis of Intrathoracic Diseases", by Dr. Funk. A six o'clock dinner was held at the Youngstown Club.—Bulletin.

Summit County Medical Society met at the Akron City Club on Tuesday evening, June 3, for its regular meeting. Dr. J. E. Monger, Columbus, was the speaker of the evening, his lecture included a moving picture of "Five Human Cases of Rabies".—Bulletin.

Wayne County Medical Society held its regular meeting in Taylor Hall, Wooster College, Wooster, on Wednesday evening, May 21. Dr. L. G. Bean, chief of the Bureau of Dental Hygiene, State Department of Health, gave an illustrated lecture showing the pre-natal and post-natal development of the permanent teeth and factors affecting their growth. He also showed how facial deformities were produced by defective dentition and the relation of nutrition to dental caries. A lively discussion followed this excellent lecture.—Eva Cutright, Correspondent.

Seventh District

Columbiana County Medical Society met in the Memorial Building, Salem, on Tuesday afternoon, June 10. The visiting speaker was Dr. Wm. H. Bunn, of Youngstown, who spoke on "Hearts". —Bulletin.

Coshocton County Medical Society held its regular meeting on Wednesday evening, May 28. Papers were presented by Dr. Edmund Cone and Dr. J. G. Smailes.—News Clipping.

Jefferson County Medical Society arranged another excellent scientific program for their meeting at the Fort Steuben Hotel on Tuesday evening May 20th.

Dr. John D. Garvin of Pittsburgh, Pennsylvania, gave a talk entitled "Indigestion." This was followed by an address by Dr. P. S. Hench of the Mayo Clinic, the subject of which was "Rheumatic Diseases and Gout—Their Differential Diagnosis and Treatment". Both talks were illustrated with slides.

These two men were on the program of the American College of Physicians which met recently in Atlantic City and they will also be on the program of the A. M. A. meeting at Detroit. —M. H. Rosenblum, Secretary.

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Eighth District

The Eighth Councilor District of the State Association held its annual meeting at Rocky Glen Sanatorium, McConnelsville, on Thursday, June 19. A dinner at 12:30 was followed by addresses by the president of the Society, Dr. J. G. Shirer, and Mr. H. A. Phillips, superintendent of Rocky Glen Sanatorium. A short business meeting was followed by remarks by the Councilor of the District, Dr. E. R. Brush, and officers of constituent societies. An address by "Dusty Miller", editor, of Wilmington, Ohio, was followed by extemporaneous addresses by invited guests. The following papers were included in the scientific program: "Spastic Colitis", by Dr. James H. Warren, Columbus; "Lung Surgery", by Dr. Andre Crotti, Columbus; and "Head Colds", by Dr. Louis Mark, Columbus, medical director of Rocky Glen Sanatorium. Officers of the Society are Dr. E. R. Brush, Zanesville, Councilor; Dr. J. G. Shirer, president, and Dr. H. A. Campbell, secretary, Newark; program committee, Dr. D. G. Ralston and Dr. C. E. Northrup, McConnelsville.

Muskingum County Academy of Medicine held its annual dinner meeting on Wednesday evening, May 7, at the Zane Club, Zanesville. Dr. W. A. Melick presided as toastmaster, and each member present was allowed two minutes to tell of his most laughable experience as a physician. A local magician and an orchestra added to the entertainment of the evening.—News Clipping.

Ninth District

Scioto County—The regular meeting of the Hempstead Academy of Medicine was held on Monday evening, May 19 at the Nurses Home, Portsmouth. Drs. Robert and Ralph G. Carothers, of Cincinnati, presented the subject of "The Modern Treatment of Fractures", illustrated by moving pictures, lantern slides and *X*-ray films. Discussion was opened by Drs. Joseph S. Rardin and James W. Fitch of Portsmouth. A buffet lunch was served at the close of the program.—Bulletin.

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

May 19—Regular meeting of the Academy at the Public Library, Columbus. Interns' night—Competitive reports of cases: "Myelogenous Luekemia", by Dr. S. T. Mercer, Grant Hospital; "Aneurysm of Subclavian Artery", by Dr. S. J. Goldstein, St. Francis Hospital. Award Committee, Drs. E. J. Stedem, J. D. Dunham and Wayne Brehm.

May 26—Regular meeting. "Surgical Management of Fibroids; Analysis of 180 Cases", by Dr. P. J. Reel; discussion opened by Dr. Fred Fletcher; "Calculi", by Dr. Wm. N. Taylor; discussion opened by Dr. H. A. Minthorne.

June 9—Regular meeting, held at the Franklin County Tuberculosis Sanatorium. Following inspection of the Sanatorium, dinner was served in the Nurses Home.—Bulletin.

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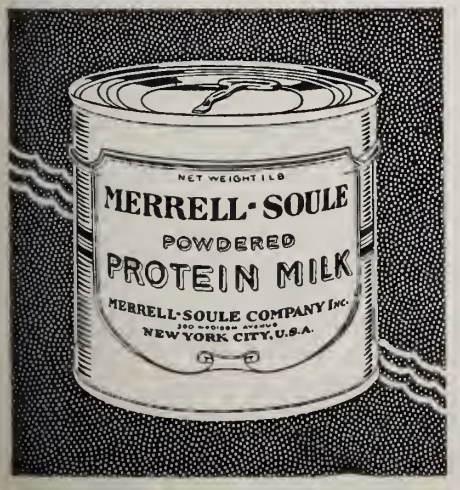
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Medical Information

Medical knowledge is being so assiduously popularized through the syndicated columns of the daily press and the innumerable inexpensive booklets on health, to say nothing of the advertisements in newspapers and magazines, that every layman knows something, and many think they know a great deal, about the vagaries of the human organism, says one writer in a contemporary publication. What would happen to anyone who retained all the information and followed all the advice so solemnly set forth is a momentous question but luckily it is of only academic interest. The enthusiastic student would be so involved in contradictory directions that by the end of a week it would take twenty-four hours a day merely to arrange a schedule that would give adequate time for the proper exercises, raisin and orange eating, masticating, sleeping, hair brushing and the thousand and one other occupations reputedly essential to a long and healthy life.

Frequently and even periodically enthusiastic advocates suggest new methods for "public education" on the true and proved facts of scientific medicine and public health. While it is obviously desirable that as many people as possible be accurately informed on these matters, the method of such propaganda is not as simple as it might seem. In fact, the popularizing and even capitalizing of the "health idea" has been responsible for a great deal of public mininformation. If "a little knowledge is a dangerous thing" a great amount of erroneous assumptions are even more dangerous. Sometimes one is almost convinced that the public might be better off if educational efforts in public health movements were confined to simple facts on sanitation, hygiene and the more generally understood fundamental sciences of preventive and curative medicine.

In commenting on this matter, the writer quoted above also makes the following observations:

But it is not only from the press that the public derives its wealth of erroneous ideas about matters medical, surgical and the like. The layman, coming to the physician for treatment, listens to his words of wisdom and interprets them in accordance with his own intellectual and experiential background, arriving at conclusions far removed from the original intention of the physician. It is not always the layman's fault; neither is it necessarily due to his stupidity. It is simply that the words mean little or nothing to him and to help himself toward a satisfactory understanding, he elaborates and interprets with the aid of his preconceived ideas and his traditional notions of medicine.

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termination is such a source of comfort and encouragement is an interesting matter to speculate about. Whatever the reason, the average person feels cheated if he has to get well without having a sonorous and tongue twisting label attached to his ailment. There is no harm in gratifying this phase of human curiosity, provided the patient is not the type that instantly crawls out of bed and pulls down the encyclopedia to gather all possible information on the subject of prognosis, complications and sequelæ.

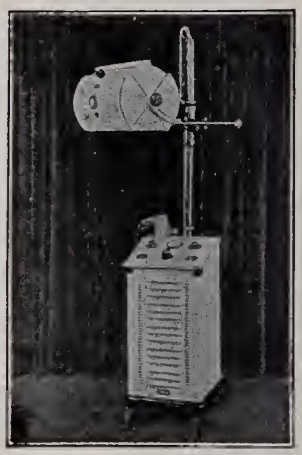
The physician is often besieged with questions as to the cause and course of the disorder and in self-defense, he is bound to furnish as intelligible a reply as possible. He is confronted with the problem of making comprehensible to the lay mind the rudiments of anatomy, physiology, pathology, and so on, in the shortest possible time, if he is to explain lucidly how the present pathological situation came about. Could he know how ludicrously he is to be misquoted, how his words are to be garbled and his meaning distorted at some later date he would doubtless retire from the sick room mute—and thereby lose his patient to some more loquacious practitioner.

Diagnoses which purport to be direct quotations from reputable physicians are frequently very amusing—to everyone but the unsuspecting originator of the terms. Take, for example, the woman who suffered from "an occasional touch of arteriosclerosis in the arm." She was sure that was what her doctor said, and who was she to dispute it? One can often ferret out the true meaning and absolve the diagnostician but sometimes the problem is too obtruse. What ailed the woman who had an attack of "pneumonia of the womb"? At any rate, she was cured by a hysterectomy, so it is unnecessary to speculate.

The physician is in a serious dilemmma. If he refuses diagnoses and explanations he is sure to be considered an ignoramus who does not even know what is the matter with his patients, much less how they got that way. If he speaks, what extraordinary pronouncements are credited to him! Sometimes he can compromise by uttering a series of indefinite remarks which by their very vagueness are not only safe but soothing. Many are the nephritics, the cardiacs, even the paralytics who have, according to their relatives (quoting the physician), died of "complications." Safe enough, they probably did. Satisfactory, too; it sounds as if it meant something very definite and profound.

To the physician who believes in educating the public falls the serious and important task of giving out information in a way that cannot be misunderstood. If one feels in duty bound to tell a mother why her daughter has developed dementia precox (fortunate indeed is the physician who knows) let it be in words of one syllable with frequent pauses and repetitions that the process of

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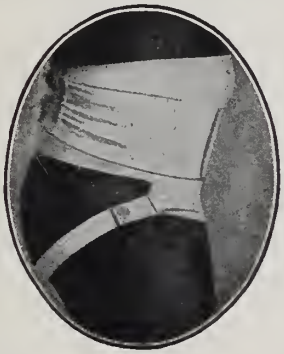
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comprehension may be complete and absolute. Even then on some sad day the admitting officer of the psychiatric hospital will hear "The doctor said she lost her mind because her ministration went to her head."

Industrial Hazard in Handling Dry Ice

A warning against handling, without necessary precautions, dry ice, a freezing process now being used in several industries, has been issued by the Safety Division of the Ohio Industrial Commission.

Claims have been filed with the Commission by five women who are believed to have been affected by the use of dry ice in connection with their employment. The women were employed at a plant where golf balls were manufactured. In making some of the balls the small cores around which the remainder of the ball is constructed are frozen before the outer level is applied. The claims filed indicate that the handling of these frozen cores in winding the balls affected the nerves of the fingers, the hands and the forearms of the claimants to such an extent that a form of neuritis was produced.

In commenting on these cases, *The Monitor*, official publication of the Industrial Commission, said:

"The symptoms noted were first a twitching or shaking of the arm due to a contraction or twitching of the muscles, numbness of the fingers, so that the prick of a pin could not be detected, inability to distinguish hot and cold and sometimes pain, and inability to use the hand. Four of the cases were treated by the same physician who reports that the symptoms were practically identical in all cases except as to severity. Two cases were more mild with only ten to fourteen days disability and a prompt recovery, while the ramaining three cases were more prolonged.

"The medical reports indicate that this form of neuritis is probably due to exposure to cold occasioned by handling the frozen cores and removing them from the containers. Since the development of these cases an instrument has been devised by which the cores can be removed from the containers without inserting the hand and without touching the surface of the core.

"There is some question, however, as to whether or not the neuritis is due to exposure to cold or to some other cause. The operation is being very closely watched by officials at the plant and any further developments pointing to a solution of this question will be thoroughly investigated."

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A famous athletic trainer always permits his men to eat all the ice cream they want. A well-known physician in Philadelphia often advises business men who are his patients to drop in at a soda fountain in the late afternoon and drink a flavored milk shake. Fatigue and nervousness are overcome and dinner is eaten later with calm enjoyment.

Such endorsement of sugar should not be overlooked. Too often home diets are lacking in this important food. The use of sugar may help in overcoming loss of appetite and in promoting indirectly a more balanced and varied diet.

For example, try a dash of sugar in cooking vegetables. It will heighten their flavor and cause them to be eaten with more relish. A dash of sugar also improves the taste of meats. The sugar blending with the salt and meat juices creates a delicious flavor. Good food promotes good health. The Sugar Institute.

"Refresh yourself with a flavored drink"

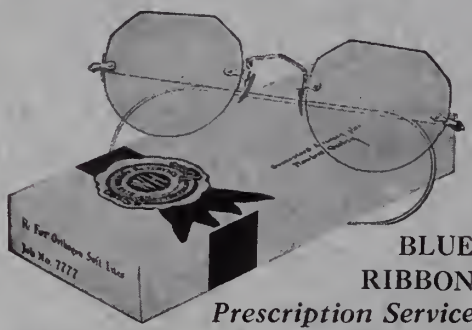
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AUGUST 1, 1930

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Number - - 8

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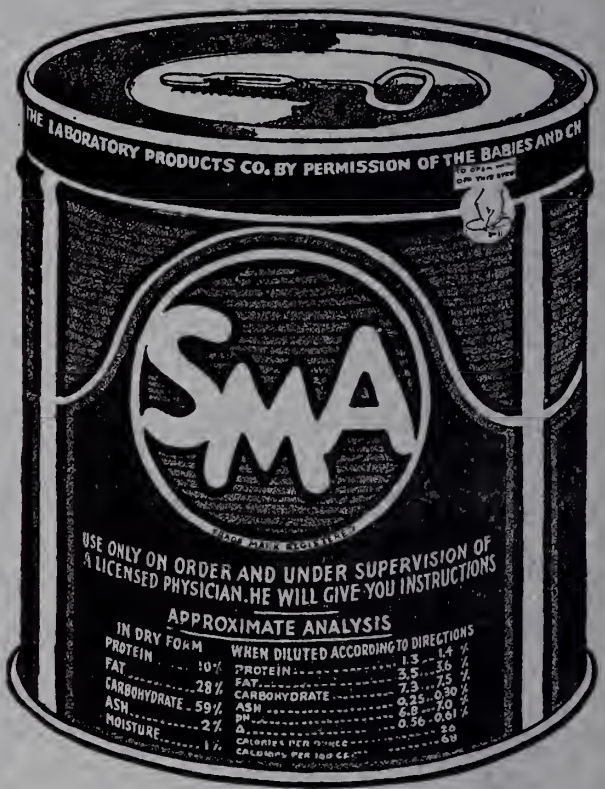
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Ohio State Medical Journal

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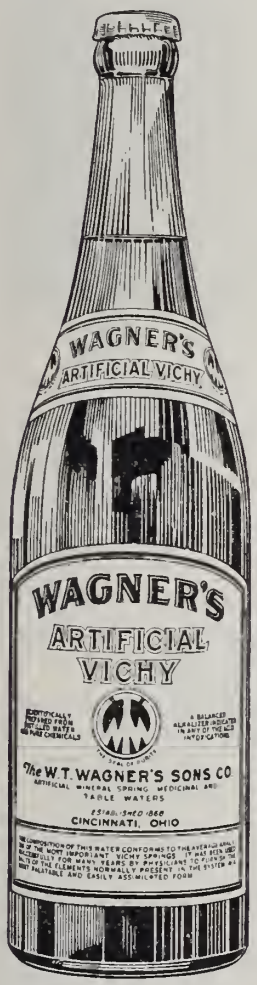
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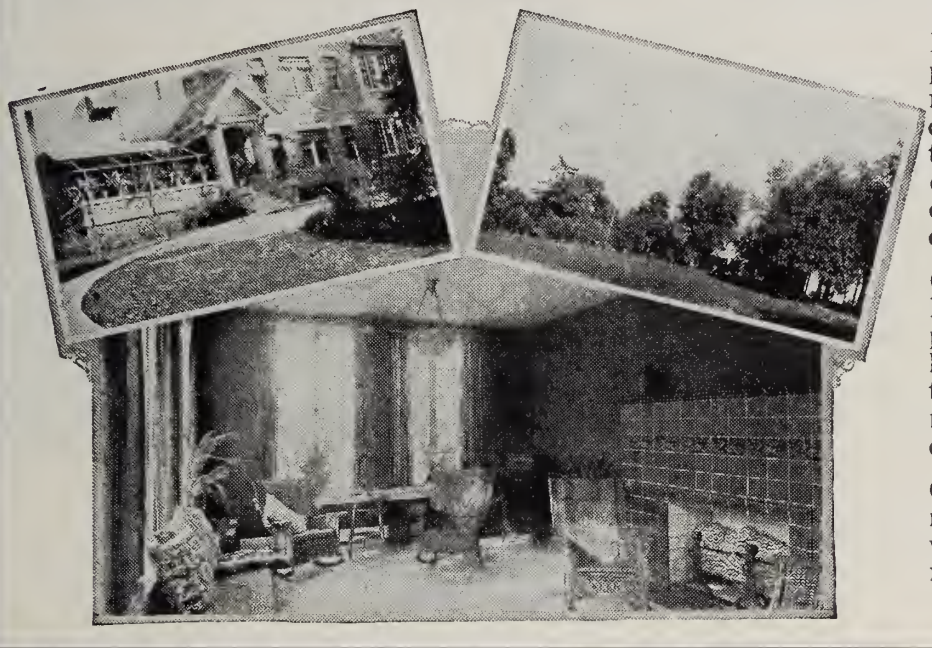
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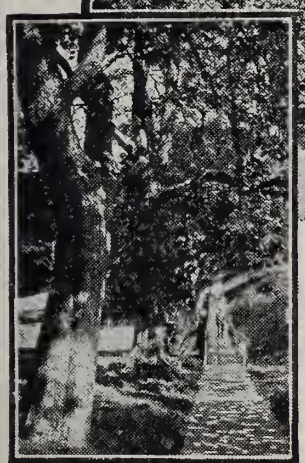
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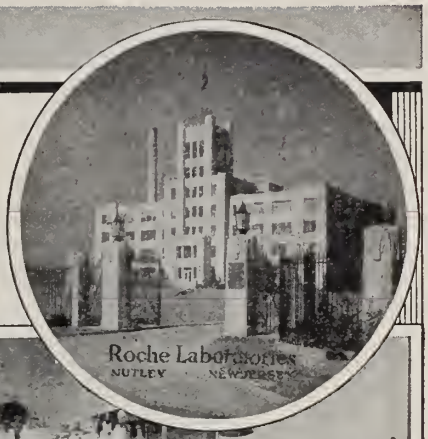
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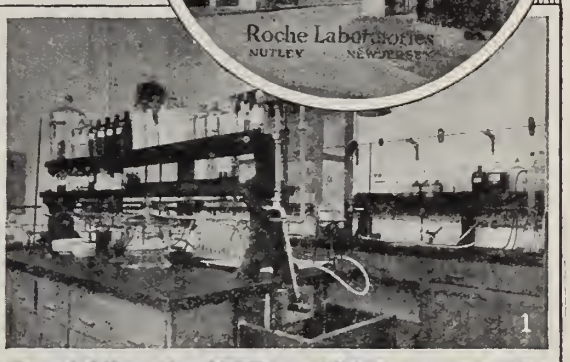
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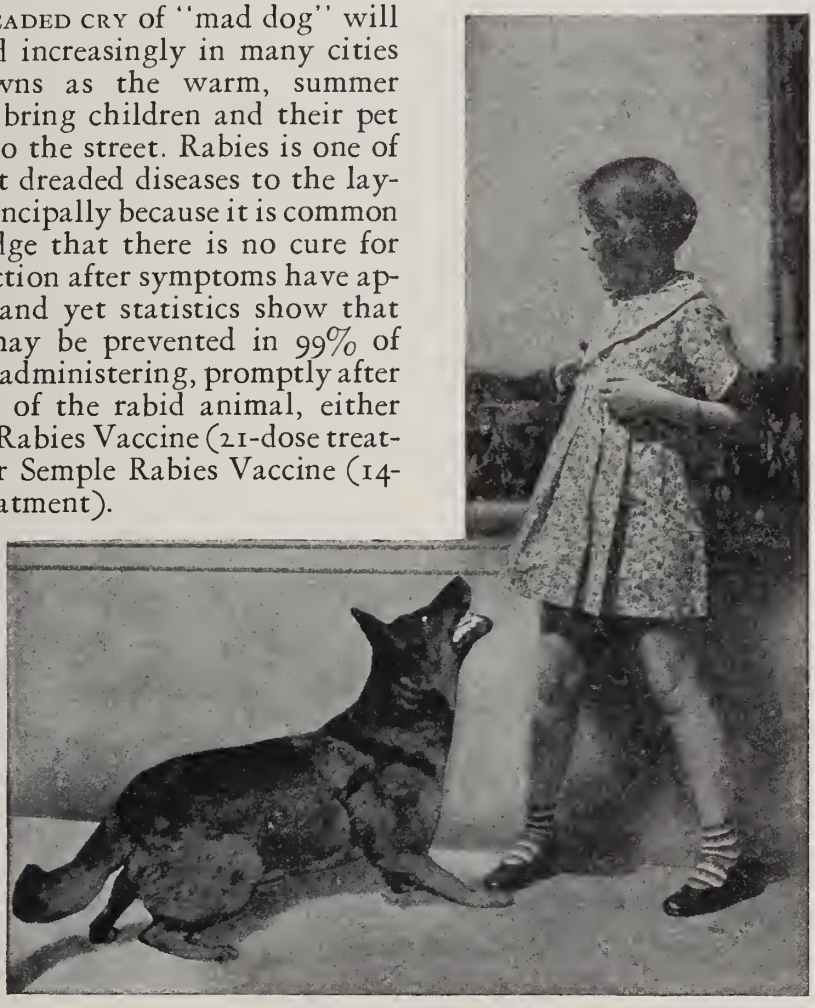
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PUBLIC HEALTH - SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Important responsibilities will rest on the shoulders of Ohio voters August 12 when they go to the polls to nominate from the throng of public office seekers those who will represent the parties in the November general election.

Importance of August Primaries

Political observers are unanimous in their belief that the next session of the Legislature will be of unusual importance and seriousness, and even more hectic than those of recent years, due to the unusual number of confusing and important problems scheduled for consideration.

The approaching party primaries has brought forth a large field of aspirants for the Legislature, including several radicals, agitators, cult adherents and those representing small, selfish-minded groups and discontented minorities, indicates that many troublesome, and even destructive, groups are planning to make the next General Assembly the battleground for their pet schemes and undesirable theories of government.

In view of the obvious tactics displayed by these groups and individuals and because of the unusually large number of controversial measures of major importance destined to come before the Legislature, it is especially important that legislators of unusually high character be elected this year. The coming session of the General Assembly should, by all means, be closed to those who lack sincerity and honesty and who are willing to align themselves with doubtful and destructive forces wholly for the purpose of obtaining support.

Of course, among the hundreds of candidates for seats in the Legislature there are many men and women of sterling character and outstanding ability. Some of them have served sincerely, honestly and faithfully in previous Legislatures. Some of them are making their first bid for public office, but their reputation as high-class and intelligent business or professional men and women have stamped them as worthy of the trust of the voters. Those candidates whose record in previous sessions of the General Assembly is beyond reproach and whose ability to cope with important state-wide questions is recognized, should be re-nominated and re-elected. Those who have never gone through the test of a legislative session should be carefully studied, analyzed and sounded out on their attitude regarding the questions of major importance destined to come before the legislative body next winter.

A sentiment gaining considerable headway throughout the entire nation is that the time has arrived for the people to begin picking their legislative representatives—both federal and state—with more care. Movements in scattered parts of the country to send men and women of proved ability in civic pursuits to legislative chambers have had tangible results, indicating that the people are anxious to have the affairs of state administered in a business-like manner and with dispatch.

The voters of Ohio will be given an opportunity August 12 and again on November 11 to demonstrate that they are in accord with the demand for greater character and more talent in its state legislature. As one statesman has well said: "There is no problem that the great American people cannot solve if they apply their minds to it". There is no problem which may come before the next General Assembly that cannot be solved to the satisfaction and benefit of the public generally if the voters of Ohio exercise intelligent selection in naming the members of the Eighty-Ninth General Assembly.

The medical profession as individual citizens and as a professional group whose primary interest is in the welfare of the public should be prepared to participate in the coming primaries and election. The attitude of the profession toward candidates and pending legislative questions must, as in the past, be determined on the basis of permanent public interest and benefit. Candidates, as well as measures, hostile to the public good should be defeated regardless of political circumstances and influences. The medical profession has a right to be heard on matters in which it is vitally interested and on which it is a recognized authority. Furthermore, its advice and counsel should be heeded. It is up to each individual physician to insist that the medical profession is heard on the many important legislative questions in prospect and through his active interest in civic and political matters assist in keeping the public accurately informed on the correct solution to public health, medical and social welfare problems.

Physical Education Procedure

Much progress has been made during the past few years in the school health education movement, leaders in that field reported at the recent National Education Association convention held in Columbus.

Interesting observations on the work that has been accomplished and optimistic predictions concerning the future were made by those who addressed the Department on School Health and Physical Education.

Many of the speakers were of the opinion that there is a growing tendency for closer cooperation and understanding between the health educator and the physical training instructor.

This is as it should be, for little may be accomplished in school health education should these two branches of the work operate at cross purposes.

The part that the school physician should take in the work also was pointed out by several of the lecturers, indicating a greater realization on the part of school officials of the importance of the trained medical man in the field of physical education.

The school physician should play a prominent role in physical education programs. All individual corrective exercises should be given only at the suggestion and advice of a physician. The advice of the trained medical man should be followed absolutely in all such cases. The physician also should be recognized as the one most competent to pass judgment on the physical fitness of candidates for the various athletic teams sponsored by the schools.

Another point that should be kept in mind is that of close cooperation between school authorities and the medical society of the community. The counsel, suggestions and fundamental place of the family physicians of every community should not be overlooked in the school health program. Physicians should be asked frequently for their comments on the work being done in the matter of health education and physical training.

That school officials are being urged to develop their health and physical education programs on the fundamentals briefly analyzed above is evidenced by the discussions made at the national conference. It was admitted freely, however, that much remains to be accomplished despite the advancement that has been made of recent years.

Health and physical education among the school children of the country can accomplish much providing the programs instituted are based on sound and conservative methods of procedure and are given proper leadership and guidance. The aim of the Department of School Health and Physical Education of the N.E.A., as stated by its leaders, is to educate school administrators as to the proper ways to proceed and how best to coordinate the various branches of the school health program. The scientific knowledge and practical experience of the medical profession should be most beneficial to school officials in setting up new programs or revising ones at present in effect, and above all school authorities should recognize and not interfere with the fundamental relationship of physicians in private practice and their student patients.

Radio "Health Talks"

At the recent meeting of the American Medical Association in Detroit, the House of Delegates adopted a resolution condemning false, misleading and harmful "health talks" over the radio, an action similar to that taken in May by the House of Delegates of the Ohio State Medical Association.

The action of the A.M.A. in its sincere and honest endeavor to assist in eliminating the broadcasting of injurious and worthless information on health and medical subjects by imposters and quacks has apparently been misunderstood by some persons, for a recent editorial published by a leading Ohio daily takes the A.M.A. to task for its criticism and charges indirectly that medical organization is trying to throttle the circulation of information on health and medical subjects.

Such was by no means the intent of the A.M.A. delegates. That the dissemination of proper, authentic, accurate and correct health and medical information is beneficial to the public cannot be disputed. In fact, the American Medical Association through *Hygeia* and otherwise has for years been one of the leaders in the movement to supply the people with correct information on these matters. What the Association had in mind was to add impetus to the growing campaign to drive from the air and from the columns of the daily press and magazines medical and health fakers and those whose single purpose is to defraud the public.

The misunderstanding which has apparently arisen is an important example of the care that must be taken by medical organization—county, state or national—in voicing the opinion of the medical profession on matters which are of tremendous public interest. Reasons for the organized action of physicians in such instances, in the light of public welfare and benefit, should always be given and in a language that may not be mistaken by the average citizen. Constructive suggestions on how to better the situation should, if at all possible, be submitted.

All of which indicates that the medical profession should at all times be awake to the realization that the public is looking to it for correct information on questions of health and medicine. Moreover, selfish and biased information and propaganda circulated by a few physicians who have not the good of the public at heart is bound

to reflect adversely on the medical profession as a whole, as well as being of no benefit or even actually damaging to the public generally.

Physicians keep more irregular hours and work under greater nervous, mental and physical tension than almost any other group of the population.

Life Expectancy of Physicians

What effect do these and other demands of the profession have on the life of the medical profession generally?

This question is difficult to answer, naturally, but an article appearing in the Statistical Bulletin of the Metropolitan Life Insurance Co., produces some interesting data on it.

"Physicians, on an average, do not live as long as the general run of policyholders of the Metropolitan Life Insurance Company", the bulletin stated. "They do live a little longer, however, than the general male population of the country as a whole.

"Their life table shows that at the age of thirty years—we may say at the beginning of his career—a physician has an expectation of life of thirty-eight years, just two years less than the holder of an ordinary policy in the Metropolitan Life Insurance Company at the same age and barely one year more than the man in the general population.

"Clearly the personal advantage to himself, which the doctor must derive from knowing when the human body is out of sorts and what to do about it, is more than counterbalanced by the exacting duties, the irregular hours, the liability to emergency calls at any and all times and in all weathers, which fall to his lot, especially in country and small town practice. Yet doctors are a highly selected lot; they cannot even begin practice until they have stood the grind of a medical curriculum, followed, in most cases, by a period of apprenticeship in hospitals. There is a certain social selection also; all of which must tend to make medical men a group with better than average physique. In spite of these initial advantages, as he runs his life course, the physician is constantly working against odds, and in the end he is left with only a meager margin of advantage over the general population of the country."

The following figures point out statistically some of the conclusions drawn in the article:

Age	Expectation of Life in Years	
	Physicians	General Population
30	38.01	37.10
40	29.49	28.82
50	21.67	21.11
60	14.63	14.26
70	8.90	8.82

During the year 1928, the *American Medical Association Journal* published the obituaries of 2792 physicians of the United States. The average age at the time of death was 63.1 years. There was not one centenarian in the entire group but 118 lived to be 85 or more. In the age period 80-84, 173 died; 75-79, 285; 70-74, 393; 65-69, 362; 60-64, 374; 55-59, 384; 50-54, 279; 45-49, 168; 40-44, 100; 35-39, 74; 30-34, 47; and 28 died before they were 30 years of age.

Many physicians neglect their own health and fail to live up to the rules they lay down for their patients. Those who possess the temperament which permits them to relax, forget work at certain times and engage in recreational and social diversions are indeed fortunate. Those who do not have this valuable characteristic should endeavor to cultivate it. The physician owes it to himself, his family, his patients and his profession to keep himself physically and mentally fit.

Some interesting suggestions to his readers on how to "select" a family physician have been published by the editor of a Mississippi newspaper.

Layman Selects His Doctor?

The comments made by the Dixie editor present a picture of a few of the characteristics many persons demand, that their family physician possess. The editor's dissertation also offers some interesting tips to physicians as to the basis of confidence in the community they serve.

"Magazines of the day are replete with articles advising the public how best to invest their money" declares the editorial. "All very good. Even more pertinent is the security of health and life. You understand the purchase of stocks and bonds, but do you know how to buy yourself a doctor?

"Do you know aught of his education? Where he practiced before entering your community? Why he left? No, you don't know any of these things. You assume that he passed the State Board of Medical Examiners in your state. All right as far as it goes.

How then shall we select a family physician.

"Choose first a man who is honorable, honest and conscientious. He will afford you greater protection than the law. Secondly; one of good habits. Thirdly: one of sound judgment. This is a wonderful asset to a physician. Beware of the doctor who is not a member of his county medical society. It is true that some poor ones belong, but few good ones do not. Select, if possible, a man who is on the staff of a recognized hospital. Regard with suspicion a doctor who objects to meeting others in consultation. His ignorance is probably worthy of concealment.

"Consider twice the doctor who demands payment in advance. True 'the laborer is worthy of his hire', but a dollar is dearly earned that costs us the respect of others.

"Everything considered, doctors are not very

different from other commodities. The cheapest is not always the best buy; and those who charge most sometimes sell inflated values."

Waiting in the Doctor's Office

One column of valuable space on the editorial page of a recent issue of a worthy and well-known national weekly was devoted to a criticism of those physicians who, it is charged, force patients to wait long hours for consultation because of dilatory methods on the part of the physician in his office organization.

"We have often wished", states the editorial in part, "that we could find some authoritative figures to tell us the cash value of the time that patients are forced to waste in the waiting rooms of medical and surgical specialists who are dilatory about keeping appointments, and who allow those with whom they have engagements for a definite hour and minute to twiddle their thumbs and leaf over dog-eared magazines in outer offices for periods ranging from half an hour up.

"These specialists are usually very busy and often overworked men, but they are no busier and no more overworked than many of their patients, who, nevertheless, manage to be on time for every engagement and regard promptitude as an obligation just as real and tangible as the payment of the butcher's bill.

"Broadly speaking, the highly specialized wing of the medical profession, with all its virtues—and they are legion—has never learned this fundamental of business; and, as a consequence, patients suffer annoyance, vexation and delay, to say nothing of the money value of their wasted time. This is perhaps the chief reason why many busy men of affairs fight shy of doctors' offices and deny themselves the benefit of expert advice as long as they dare."

Admitting the value of promptness and of well-organized office routine and with the possibility of being accused of quibbling, one may wonder why the writer of that criticism of the medical profession has left so many questions unanswered.

How much time is wasted by the physician who waits at his office for patients who make appointments over the telephone and never show up, or call up at the hour of appointment to inform the doctor that they will be unable to keep their engagement?

Is it the public's desire that physicians turn out patients like an automobile factory—so many per hour—whether or not the examination is completed or only half finished?

How much valuable time is wasted by doctors in answering emergency calls during office hours and for many of which he never collects a cent of compensation?

Does the patient who regards "promptitude as an obligation just as real and tangible as the payment of the butcher's bill" regard this same promptitude an obligation just as real and just as tangible as the payment of the doctor's bill?

How many patients who are so ably represented in the quoted editorial are subject to a call to duty 24 hours a day, 365 days in every year?

These are just a few points which have not been adequately covered in that editorial.

The Urge for "Reorganization"

"We need to reconstruct and reorganize our federal agencies for health if the United States is to keep up with the health promotion activities of European countries", declared a leader in the public health field recently in an address before a health organization of an Ohio city.

"The states, cities, and in increasing numbers, the counties have created the authority and support to protect and develop health", he continued, adding, "But public officials, by refusing to grant large enough appropriations for health work are hindering the work. Consequently, the people in every community are building what amounts to an official social government to obtain for themselves the benefits of modern public health knowledge."

Reorganization of the present federal health agencies offers a debatable issue. Many observers declare the present set-up is functioning efficiently. Others dispute this declaration.

The suggestion of the speaker that public health activities in this country be modeled after those functioning in several European countries may be open to criticism. In the opinion of many well-informed persons the adoption by America of some of the public health methods employed in some European nations would be a fatal mistake and would be another step in the direction of complete state medicine.

Steps taken by many communities to build up their own public health programs should lead to fruitful results, providing they are based on sound principles and are given proper leadership. Local enterprises are far more likely to be of benefit to the people because they are imbued with the intimate and personal contact and interest of the citizens of the community than highly mechanized systems set up by state or federal agencies and supervised at long range by officials, unfamiliar with and little concerned about local conditions.

The idea which some persons hold that the health, as well as the social and economic affairs, of the people must be supervised by centralized governmental agencies is distinctly fallacious. Many communities already have demonstrated that they are still capable of running their own affairs in an efficient and beneficial way.

Liver Function; with Especial Reference to Sympathico-Adrenal Response Test*

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KEEPING in mind the limits in interpretation of values, that the liver is a complex structure endowed with a multiplicity of functions, that no single function test, as yet, is capable of accurately estimating the degree or extent of damage, or which function is most seriously impaired. That the functions may overlap, and that the liver has an extensive margin of safety, can tolerate extensive injury and still retain power to regenerate impaired cells. It is evident, therefore, to gain a definite impression of cellular damage or functional deficiency a correlation of the several tests must be used.

The clinical value in determining liver function must be at the time before hepatic breakdown is so obvious that the physical findings make tests superfluous. In chronic liver disease the amount and distribution of scar tissue is the important factor governing functional efficiency. In portal cirrhosis if the fibrosis is placed so as not to interfere with the compensatory hyperplasia that takes place, the functional efficiency is kept high. When the hyperplasia can keep pace with the injury (as in the hypertrophic form) the prognosis is better. If however, the fibrosis is early and diffuse, and interferes with hyperplasia, holding the tissues in a vice-like framework (atrophic type) the function is greatly diminshed and added disturbances soon take place, as portal vein obstruction, etc. In gummatous cirrhosis the pathology is localized or scattered, not interfering with the compensatory hyperplasia, so little or no change in function occurs.

SOME ASPECTS OF CARBOHYDRATE METABOLISM IN LIVER

Simpson and Macleod in their work state the liver glycogen is the only source of the blood sugar, since muscle glycogen is converted after mobilization into lactic acid and the latter must then be synthesized into liver glycogen before it can supply the blood with sugar.

Cannon in a recent review writes that there is evidence that the process of storage by segregation in hepatic and muscle cells is dependent on the secretion of insulin; removal of the pancreas causing the prompt appearance of hyperglycaemia and a reduction in the hepatic glycogen reserves. The administration of insulin to sugar fed depancreatized dogs reduces the blood sugar to the normal percentage and causes glycogen to accumulate again in large amounts in the liver.

Davis, Hall and Whipple demonstrated the protective action of the liver glycogen against post anesthetic degeneration and show the striking recuperating property of the liver cells under high carbohydrate feeding following obstruction of the biliary passages.

Forsgren in studying the relationship between the formation of bile and glycogen in the liver of the rabbit, found that a cycle existed in the normal animal during which the percentage of glycogen and bile varied inversely to each other. That the glycogen was low when the bile was greatest in amount and vice versa, also that the glycogen is first deposited around the central vein of the lobule and remains there longest, showing why in obstruction of the common duct we have a decreasing glycogen content in the liver.

Using the denervated heart as an indicator Cannon found that as the blood sugar fell, a critical point was reached at about 70 mgm. per cent, when the heart began to beat faster, a phenomenon which failed to appear if the adrenal glands had been inactivated. If the blood sugar continued to fall the heart rate became faster, thus indicating a greater output of adrenin, and if the blood sugar arose, either because of intravenous injection of glucose or because of a physiological reaction, the heart beat returned to its original slow rate, thus indicating a subsidence of the extra discharge of adrenin. Since medullo-adrenal secretion is controlled by splanchnic impulses, and since such impulses in cooperation with secreted adrenin are highly affective in causing an increase in blood sugar, it is clear that the reduction of the glycaemic percentage below a critical level calls forth an agency, the sympathico-adrenal system, to corect the condition. If the liver is well supplied with glycogen such activity can restore the blood sugar to the normal level.

The work of Mann and his co-workers on glycogenolysis due to epinephrin has opened a fertile field for investigation along this line, that by studying the blood sugar curves following injections of epinephrine would give us a method of testing the glycogenic function of the liver. Selling Brill writes, the clinical implications of this work which seem valid are:

1. That patients with marked, widespread disease of the liver will give after the injection of epinephrin an almost flat sugar curve; and

2. That such patients should be given large quantities of dextrose preoperatively and postoperatively.

Ravdin believes the blood sugar is not an index to the liver glycogen reserve and a normal blood sugar has been repeatedly found in patients and animals in which, either by glycogen estimations or by their response to epinephrin, there was evi-

*Read at Staff meeting of Good Samaritan Hospital, Cincinnati, Ohio, November 20, 1929.

dence that the glycogen reserve was nearly depleted.

We observed early in our studies that the glycogenic function of the liver seemed to be the pivot around which the other functions revolved, and that the liver that contained a large reserve of glycogen was not as susceptible to degeneration.

TESTS USED

1. The sympathico-adrenal response—we use this term to designate in producing glycogenolysis.
2. Degree of retention of dye. (Bromsulphalein).
3. Quantitative Urobilin in Blood. (using acriflavin as a standard, described by Blankenhorn).
4. Serum Bilirubin (van den Bergh).
5. Quantitative Bile Acids in Blood. (modified Pettenkofer).
6. Blood Cholesterol.
7. Blood Platelets.

TYPES STUDIED

Observations were made first on a large number of apparently normal persons to get our own standards. The next group contained borderline cases, (early cirrhosis, gall-bladder disease without jaundice). Then cases with marked hepatic disease.

Technique used in the sympathico-adrenal response test. Patient on full diet before test, in morning before breakfast, blood sugar estimation made, immediately after ½ c. c. adrenalin chloride 1:1000 injected subcutaneously, then blood taken every fifteen minutes for one hour and sugar curve plotted.

Before using this test on hepatic types of cases, we made thirty blood sugar curves on normal adults and found that ½ c. c. adrenalin chloride produced a curve rising to its height of about 30, 40 or 50 mgm., often 60 and 70 mgm. in the first half hour, then declining slightly to the hour point. The majority showed an average rise of between 30 and 40 mgm. over the fasting level.

Borderline and severe hepatic cases showed a distinctly different curve, the rise would be delayed, our average showed 12 mgm. per cent above the fasting level, the curve often depressed 5 or 10 mgm. per cent.

In only two cases did any unpleasant symptoms occur, neither alarming, both suffered with myocardial degeneration, pallor and tremor were predominant symptoms. We believe this test will show a deficiency of the carbohydrate metabolism in the liver in hepatic disease. The height of the fasting blood sugar indicates if deficiency of the internal secretion of the pancreas is present and how much insulin is necessary.

For a number of years we have been using glucose solutions, subcutaneously and intravenously, as a preoperative and postoperative procedure in poor surgical risks and in nearly all hepatic cases, at present using this test as a control, we can administer carbohydrates intelligently. The significance to the surgeon of this function is often essential to the life of the patient.

Tests made by us would indicate that the severely injured liver (as indicated by a flat or depressed curve) is able to store and synthesize glycogen to a moderate extent under active carbohydrate feeding (using intravenous glucose 5 per cent in normal salt—injected slowly). Ravdin states the injected dextrose is better utilized in the patient who is not dehydrated.

The value of this is apparent in preparing patients for operation. Sansum and Woodyatt demonstrated that dogs lose considerable amounts of dextrose during the administration of anesthesia and narcotics. MacLeod and Pierce also have shown that in anesthetized dogs there is a rapid disappearance of glycogen from the liver. Furthermore, chloroform and ether act on the liver to produce degeneration. Nitrous oxide and oxygen anesthesia does not cause this to the same degree but may produce considerable glycogenolysis if asphyxia occurs during anesthesia. In three cases with marked deficiency of carbohydrate metabolism, other tests made also showing severe hepatic cell injury, after preparation with glucose, operations performed under spinal anesthesia, avoiding morphine, followed immediately with glucose, recovered with no symptoms of shock. Cases of this type observed before under general anesthesia and indifferent glucose preparation were attended with severe vascular depression, usually terminating fatally.

In continuing the administration of glucose post-operatively we find that a normal sugar curve is usually obtained in six or seven days (especially where duct obstruction has been prominent). At present we are studying the carbohydrate metabolism of the liver in every type of preoperative case, there being no doubt that patients under large amounts of carbohydrate withstand operation better, recover liver sufficiency earlier and that vascular depression states do not occur as frequently. In using isotonic solutions, injecting slowly, especially when a lowered tolerance exists, we have had few postinjection reactions. We have found that insulin in conjunction with glucose acts favorably in cases where there has been prolonged duct obstruction.

That the liver helps maintain the normal coagulation time of the blood has long been known, that calcium plays an important part is doubted by many observers. Ravdin has demonstrated a marked reduction in the coagulation time of the blood of the jaundiced and normal patient and dog after the intravenous injection of dextrose. Other sugars do not produce the same results, nor does sodium chloride given in concentrations which will exert the same osmotic pressure. The hepatectomized dog and the patient with an irreparable hepatic lesion fail to respond favorably to dextrose, nor do they respond to intravenous calcium chloride.

That deficiency of the carbohydrate metabolism

of the liver exists in many diseases would be indicated by the curves we obtained. Curves in unresolved pneumonia (four observed) showed increases of 5 to 6 mgm. One pneumonia terminating fatally showed a reduced curve of 8 mgm. Severe septicaemia showed only slight increase. Two cases of peritonitis showed a depressed curve. Lung abscess in elderly man terminating fatally showed depressed curve.

DYE RETENTION USING BROMSULPHALEIN

This test is based on the removal of bromsulphalein from the blood stream, the method employed as advised by Rosenthal and White. Under normal conditions five minutes after the injection, 20 to 50 per cent of the dye is present in the serum with an average of 35 per cent, and in thirty minutes the serum is free of the dye. In suspected early liver disease it is advisable to make readings at exactly five minutes and at thirty minutes.

We observed no untoward effects, no local irritation or subjective symptoms of any kind. The specificity of this test has proved a valuable adjunct in our clinic, affording a quantitative measurement of the severity of the impaired function.

SERUM UROBILIN

This test is of great diagnostic and prognostic value, values increasing with slight injury to the parenchyma. In suspected liver disease without clinical symptoms increased serum urobilin is a valuable diagnostic point. It is especially valuable in diagnosing portal cirrhosis. In portal cirrhosis with ascites a steady increase in urobilinogen is always regarded as a bad prognostic point. The presence of increased values after clinical jaundice has subsided, would indicate the persistence of a hepatitis.

We have found that the dye determinations and urobilin determination run parallel.

SERUM BILIRIUBIN

Application of the van den Bergh test using the direct and indirect reactions has proved satisfactory as a diagnostic point. A prompt direct reaction indicates obstructive jaundice involving chiefly the common duct. The delayed direct reaction suggests the hemolytic form of jaundice. The biphosic direct reaction occurs most frequently in toxic and infectious forms of jaundice.

Bilirubin from the gall-bladder always gave prompt direct reactions. Bilirubin from hemorrhagic exudatis into serous cavities gave delayed direct reactions. In the indirect reaction with readings over 1 unit, various pathological states of liver or bile tract diseases may be inferred to exist. In latent obstructive jaundice with absence of biliuria there will usually be found from 2 to 4 units. In pernicious anaemia with a latent hemolytic jaundice readings may be much higher. Latent jaundice found in syphilitic disease of the liver may presage that a frank jaundice will follow arsenical treatment. In continued use of arsenical treatments it is advisable to repeat the van den Bergh test from time to time as early hepatitis is easily determined in this way.

In our observations the bilirubin content of the serum is not always an index to liver dysfunction. We have obtained normal van den Bergh readings with positive urobilinogen, dye retention and decreased glycogen curve, that would indicate the presence of a latent hepatitis.

BILE ACIDS

Using the modified Pettenkoper reaction (described by Aldrich) we found high values most frequently in diseases associated with jaundice, higher as a rule in the early stages, decreasing in the later stages of jaundice. We found no correlation between the bile pigments and bile acids, high values being found at times in the absence of jaundice. In two of our cases in which tests were repeated at intervals, the bile salts returned to a normal level while the serum bilirubin and urobilin remained high.

It would seem from our observations that the bile acid determinations are not a reliable diagnostic point in determining impaired function.

CHOLESTEROL

Normal values for cholesterol in the blood plasma (some 400 determinations made) were found to vary from about 100 mgm. to 180 mgm. per 100 c. c. We call attention to this on account of the wide range of cholesterol values in every classification.

Cholesterol values were found increased in extra hepatic jaundice to a marked degree. In biliary cirrhosis high values were found consistently. In portal cirrhosis high values present at times.

BLOOD PLATELETES

In a number of cases of advanced liver injury associated with jaundice and marked functional deficiency we found the platelets greatly reduced. The coagulation time in these cases was reduced. We are not attempting at present to draw any conclusions until we can study more cases.

Types observed: Carcinoma of Pancreas, obstructive jaundice about 5½ mo. 110.000. Carcinoma of Stomach with extensive liver metastasis. 122.000. Carcinoma of Pancreas, obstructive jaundice, 3 mo. 108.000. Cirrhosis (atrophic type) jaundice. 114.000. Cirrhosis (hypertrophic type) Associated with diabetes mellitus. 142.000.

CONCLUSIONS

Multiple and repeated functional tests yield in information of the greatest significance in the study of liver disease. The tests proving of greatest clinical value and general usefulness in our clinic are the sympathico-adrenal response, serum urobilin, degree of detention of dye (Bromsulphalein) and the van den Bergh.

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Prostatic Hypertrophy

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OBVIOUSLY this subject is a broad one. The purpose of this presentation therefore, is a statistical review of 113 cases of hyperplasia or sclerosis of the prostate gland, 100 of which had suprapubic prostatectomies; thirteen died before any preparation could be instituted or during our preparation.

During this period in which these men were operated, no patient was refused prostatectomy. This procedure of necessity made us take desperate chances with a few cases. We made no particular effort to save our mortality record other than to prepare the patient, before attempting enucleation of the gland. We feel that proper preparation is more essential to a low mortality than the type of operation performed.

Laboratory tests by which we are prone to judge the operability of our patients are very essential, but had we relied entirely upon them, some of our patients would have been refused surgery.

One dealing with these old men over a number of years learns to evaluate their physical and mental make up. Some of these men were very poor risks from the laboratory findings but made excellent recoveries. Laboratory findings in others were excellent but a few of these had a stormy convalescence. Laboratory tests are not the only criteria upon which to operate or refuse operation.

Prostatic hyperplasia is predominately a disease of the white man. Upon reflection one would think that the reverse would be true. However, a survey of clinical cases in our wards shows many negroes suffering from urinary obstruction and infection but they are usually younger men and have a venereal background. From this fact, we might conclude that early infections furnish an immunity to prostatic hyperplasia in later life.

Ninety-two of these cases were white and eight were negroes, and only four of the negroes had an adenomatous hypertrophy; four had small sclerotic glands.

True prostatic hypertrophy is rare before the age of fifty. In men suffering from obstruction of the vesicle neck before this age, we usually have found a small sclerotic prostate with a bar or a contracture of the bladder neck. It is seldom necessary in these men to do a prostatectomy as they are better handled by one of the many types of Punch operation. Chart I shows the age incidence. Two cases occurred before the age of fifty; one in a colored man forty-eight years of age who had a large glandular hyperplasia; the other a white man forty-nine years who presented a sclerotic type of obstruction with associated hyperplasia. Between the ages of fifty and fifty-nine there were fourteen cases. This might be called the pre-prostatic age. The two decades between sixty and seventy-one shows an equal number of patients presenting themselves for operation. This period is truly the prostatic age, as seventy-eight men were operated on in this period. This group of men gave the average duration of their symptoms as five and one-tenth years. Most men after the age of sixty begin to decline in general body vigor and the addition of five years of frequency, urgency, dysuria and loss of sleep, together with the remote effect of back pressure and infection upon the kidney and bladder, is usually responsible for these men presenting themselves as poor surgical risks. The oldest man in this series was eighty-seven years and six months of age. Between the ages of eighty and eighty-nine, six patients were operated; five recovered. They were all better operative risks than many of the men in the younger groups. The age of the patient in itself is no contraindication to this operation.

The initial symptom of men suffering from enlargement of the prostate is practically always frequency of urination. This is usually quickly followed by urgency and hesitancy in starting the stream. Painful urination and complete retention may follow in quick succession or a number of years may elapse before they occur. Chart II gives a list of the chief complaints of the patients upon admission to the hospital and is not concerned with their previous symptoms.

Many of the patients gave more than one of these symptoms in his chief complaint. However, forty-seven patients presented themselves during the period in which frequency and urgency were the only symptoms, while twenty-eight patients had painful urination associated with frequency and urgency. Twenty-seven patients complained of difficulty in voiding but denied ever having had an acute retention. The agony of acute retention was responsible for driving forty-four of these patients to the hospital for relief. Many had had other attacks of complete retention; thirteen presented themselves with their first attack. The relief of complete retention by catheterization, once or twice, will occasionally relieve the patient for months or even years, but more often this condition is the signal for operative interference as it is likely to repeatedly recur at short intervals. Operation is much less serious than repeated catheterization. Nine men sought relief because of incontinence of urine. This symptom in six cases was due to overflow, the result of large hyperplasias. It occurred in three cases from smaller types of prostatic hyper-

Read before the Northwestern Ohio Medical Association, Findlay, Ohio, October 8, 1929.

From the Urological Service, Starling-Loving Hospital, Ohio State University.

CHART I

AGE INCIDENCE

40-49	2
50-59	14
60-69	39
70-79	39
80-89	6

CHART II

CHIEF COMPLAINT ON ADMISSION

Frequency and Urgency	47
Dysuria	28
Difficult Urination	27
Acute Retention	44
Incontinence	9
Hematuria	9
Pain	
Bladder	48
Hip	9
Rectum	7
Penis	10
Lumbar Region	4
Abdomen	3
Inguinal Region	2
Perineum	1

CHART III

DURATION OF CHIEF COMPLAINT

1-5 years	76
6-10 years	16
11-19 years	7
20 years	1

Average duration 5.1 years.

CHART IV

DURATION OF CHIEF COMPLAINT

Grouped according to age

Age	Patients	Years
45-49	16	3
60-79	78	5
80-89	6	8

Average duration 5 yrs., 4 mo.

trophy with marked infections of the bladder, without complete retention.

Hematuria was the presenting complaint in nine cases. Five were suffering from acute retention at the time and the bladder content was practically all blood and clot. All of these hematurias were marked and none were associated with carcinoma of the prostate. We seldom have seen carcinoma of the prostate give rise to massive hemorrhage as was seen in these cases. Pain was found to be a variable symptom, although practically all of these men complained of some type of discomfort. Some with large prostates and completely distended bladders complained of no pain; others under the same conditions suffered intense agony. Pain in the bladder region and particularly at the bladder neck occurred forty-eight times. Ten men complained of pain referred either into the lumbar region, groin, perineum or penis. Several patients complained of a sense of fullness in the rectum or perineum. Pain referred to the hip, a symptom when associated with prostatic symptoms is often indicative of carcinoma of the prostate, was present in six of these men when only a hyperplastic gland was found at operation.

A review of the chief complaints shows that over 50 per cent of these men sought relief from some disagreeable or unbearable symptom which was added to their frequency of urination. One is astonished many times by the fortitude displayed by these old men to stand continued punishment.

Chart III shows the duration of the chief complaint. One patient suffered continuously from some type of urinary difficulty for twenty years. The endurance of seventy-six of these men failed or some unbearable symptom developed within a period of five years. Sixteen men avoided complications and suffered from six to ten years while seven suffered from eleven to nineteen years.

Chart IV shows the average time suffered by these men at different ages. In the younger group, sixteen patients suffered an average of three years; seventy-eight patients fell within the sixth and seventh decades and suffered an average of five years; in the older group the average duration of the chief complaint was eight years. The average duration of symptoms before the patient presented himself for operative relief was five years and four months. In other words, 100 men suffered more than 500 years before seeking operative relief.

We feel that the patient with an enlarged prostate that develops a complication early, that drives him to operative relief, is more fortunate than the one that develops some complication after years of moderate urinary inconvenience, because he usually has not suffered the severe renal damage that occurs in the latter case.

Why do these men avoid operative interference for so many years? Inquiry has allowed us to group these patients as follows:

The first group had a fear of the operation. Some felt that it would cause their death or be followed by unbearable sequellae. They had a relative or a friend whose experience they cited as an example.

The second group accepted their urinary difficulties as a necessary part of their declining years and therefore sought no relief.

The third group was made up of men who consulted the advertising section of our metropolitan and farm papers or perhaps the family medical book. He may also have had secret conferences with the corner druggist who presented him with a new and approved remedy every time his victim returned and if the patient did not do well he advised the use of a catheter.

The fourth group consulted the chiropractor and it was an amazing fact that a great many of this group were intelligent and well-to-do individuals. Some of these patients had their spine

adjusted, some had the prostate adjusted by massage, but by far too many times, the patient made a financial adjustment without relief.

We had one patient who admitted spending three years time and $1800.00 having twenty-one stones and an enlarged prostate adjusted. We restored the man to health and his business for considerably less, in six weeks.

The fifth group consulted the Christian Scientist reader. They suffered with perfect comfort and usually urinated without passing water. These patients were seen in coma usually, but they passed to their graves with a death certificate signed by some physician,—this same certificate to be used as an affidavit of the incompetency and ignorance of the medical profession.

The sixth group of men consulted a physician who unfortunately had the proper remedy on his shelf or concealed in a noisy or purring cabinet along the wall. Or he may believe in the penetrating and absorptive power of some particular ray of the spectrum which when dashed upon the old gentlemen left only a sore spot where all was well before. Or perhaps, he was the owner of some particular devilish type of vibrator with which he believed he could rap into submission the progressively unruly gland.

In the seventh group were placed those unfortunate old gentlemen whose loving family and many friends had decided that it would be better for him to spend his remaining years struggling with frequency of urination, attacks of acute retention, or adjusting a rubber urinal to care for his incontinence. Fortunate is the old man who has no family or friends to advise him as he generally comes to operation early, recovers and lives in comfort his remaining years.

The mortality from prostatectomies used to be 25 per cent or more. Today this percentage has fallen to 5 per cent or less in the hands of men doing this type of surgery. However, we are not receiving the prostatic patient today under any better conditions than they were twenty-five years ago. He does not present himself any earlier than he used to and we have the same regime of complications that follow in the wake of this disease as well as the complications incident to his age, to repair before he should come to operation. Preparation of these patients before operation is responsible for the marked drop in operative mortality. These men do not only have damaged urinary systems but every other system and organ has suffered in proportion.

This fact makes it very necessary in doing prostatic surgery to have a medical consultant in close touch with the case during the preparatory period as well as following the operation. His advice should be heeded as to the operability of the patient, his findings should guide also, in the choice of the anesthetic. We feel that his careful watch of the cardio-vascular system alone, has saved our mortality record at times. Many of the difficulties such as myocarditis, high and low blood pressure, gastric upsets and the sluggish bowel that he finds at the first examination, quickly right themselves as soon as the bladder drainage is instituted. Bladder drainage is therefore the most important single factor in the preparation of the patient.

The type of drainage instituted depends upon the type of case, the vigilance and experience of the house staff as well as the surgeon. Drainage may be carried out by intermittent catheterization, the indwelling catheter or suprapubic cystotomy. No one method is applicable in all cases. At times, a combination of all three methods is necessary to safely prepare a patient. Sixty-six patients in this group were successfully drained by indwelling catheter. This method means a financial saving to the patient; it permits a wide exposure of the bladder at the time of enucleation of the gland; but the greatest advantage of this method is that it permits one to successfully control the decompression of the bladder. The first disadvantage of this type of drain is that the patient may not be able to wear it. (This occurred in three of our cases); second, an infection of the urethra and bladder and third, it may not afford sufficient drainage. This occurred six times in this series and was followed by suprapubic cystotomy. No death was due to this type of drain.

Suprapubic cystotomy has been used by us where catheter drain has been impossible or unsuccessful; where prostatic obstruction is complicated by stone, tumor, diverticulae, blood clots or marked infection. It affords adequate drainage but one is never sure that he is going to be able to successfully control the decompression of the bladder. Visualization at the time of enucleation is not as good as with the indwelling catheter. A primary suprapubic cystotomy was done for drainage in twenty-three cases. In nine other cases, it followed unsuccessful or insufficient catheter drain. We feel that this method has been responsible for two preparatory deaths. Intermittent catheterization was used in only two cases.

We are convinced that the most critical period in the preparation of the prostatic for operation, is the first few days of bladder drain and from previous experiences we are sure that gradual decompression has saved us much anxiety during this period. It will be noted that we decompressed seventy patients in this group. It was short in a large number but about one-half of them demanded a gradual decompression of the bladder to allow the kidney to readjust itself to the absence of back pressure.

Chart V shows that forty-four of these men came in with complete retention. They were all decompressed. Twenty-two other cases with retention of more than 200 c.c. were cared for in a like manner. Twenty-seven men with retention of less than 200 c.c. were not decompressed and

CHART V

RECORD OF RETENTION

Complete retention	44
50-100 c.c.	10
1-200 c.c.	17
2-300 c.c.	7
3-400 c.c.	7
4-500 c.c.	4
6-700 c.c.	4
7-800 c.c.	1
1-2000 c.c.	3

No record in 3 cases.

one man in this group was found in a mild uremia the next day because he had opened his retention catheter and allowed it to drain freely. It is because of the case mentioned that we are afraid to drain the bladder completely unless the patient has been catheterizing himself regularily or has a very small residuum.

As soon as drainage or decompression has been established, the determination of the kidney function is next in order. 1 c.c. of phthalein is administered intravenously and collections made

CHART VI

PHENOLSULPHONPHTHALEIN TEST

Normal P.S.P. Percent	Admission	65-80 % Preoperative
Trace	5	3
1-9	3	3
10-19	8	3
20-29	9	13
30-39	14	28
40-49	17	19
50-59	16	23
60-69	9	16
70-79	5	11
80-89	4	4
90-99	0	3

No record in 10 cases.

for the first and second hour. Sometimes collections are made every half hour according to the method of Shaw and Young. This is the most valuable laboratory procedure to use as a guide in the preparation of the prostatic patient for operation. Chart VI shows that twenty-five of these patients had less than 30 per cent phthalein upon admission; forty-seven between 30-60 per cent; eighteen more than 60 per cent. We never allow primary high phthalein readings to lead us to the conclusion that preparation will be short and uncomplicated as too many times they drop rapidly after the institution of drainage. Uremia and other complications may follow in these apparently normal renal cases as well as in the patient with diminished renal function. This test is not always an accurate index of kidney reserve. Low phthalein tests do not always contraindicate prostatectomy. Three of our cases were operated on with a two hour phthalein reading of less than 20 per cent (10-15-19 per cent); three with between 20 and 30 per cent; fifty with less than 60 per cent and thirty-four with over 60 per cent.

A laboratory procedure that is always run as a check with the phthalein test is the determination of the blood urea or non-protein nitrogen. While the phthalein test tells you what the kidney is doing at the time of examination, tests of nitrogenous retention in the blood stream give you an insight into the past history of kidney function. This test therefore, is of value in estimating the reserve capacity of the kidney. Forty-three patients entered the hospital with a non-protein nitrogen determination that might be considered normal. Chart VII shows the number of patients and the amount of non-protein nitrogen retention per 100 c.c. of blood.

The term stabilization used by Bugbee has its

CHART VII

PRIMARY N. P. N.

Normal	30-35	mgms.
19 patients	20-29	mgms.
24 "	30-39	mgms.
17 "	40-49	mgms.
10 "	50-59	mgms.
12 "	60-69	mgms.
3 "	70-79	mgms.
2 "	80-89	mgms.
3 "	90-99	mgms.
2 "	100-109	mgms.
1 "	176	mgms.

most valuable application when we are determining renal function by these tests. Stabilization may be either low or high in either of the tests, but the individual must have reached a place before the operation is to be considered, in which the phthalein and non-protein nitrogen is practically constant. Stabilization of the physical economy of the individual is important. The pulse rate must not vary from day to day, the appetite must be good and he must enjoy his tobacco and have a persistently moist tongue. In other words, the patient is not ready to operate until he has stabilized all of the laboratory findings and his general well being.

CHART VIII

J. B. A.—73 Retention 1200 c.c. Suprapubic Drain

Date	N.P.N.	Ap. T.	P.S.P. 1 hr.	P.S.P. 2 hr.
3/2	137 mg.		0	0
3/11	80 mg.		Tr.	5%
3/13	83 mg.			
3/16	80 mg.		0	5%
3/21	Suprapubic Cystotomy			
3/24	63 mg.		Tr.	5%
3/25			Tr.	5%
3/26		15 m	5%	5%
3/31	58 mg.			
4/2				12%
4/4	42 mg.			
4/8				10%
4/10	50 mg.			
4/15				15%
4/20	51 mg.	16 m		17%
4/23	54 mg.			
4/27	55 mg.			19%
4/28	Prostatectomy			
5/28	Discharged			

Chart VIII and IX gives the laboratory data

CHART IX

Chas. C.—64 Retention 1500 c.c.
Catheter Drain

Date	N.P.N.	Ap. T.	P.S.P. 1 hr.	P.S.P. 2 hr.
3/10			Tr.	5%
3/16	66 mg.			
3/18		30 m	Tr.	10%
3/24	55 mg.			
3/25			Tr.	5%
3/26			5%	5%
3/30			5%	10%
3/31	60 mg.			12.5%
4/2				15%
4/4	52 mg.			
4/11	45 mg.			
4/15		18 m		10%
4/20				11%
4/21	42 mg.			
4/22				15%
4/24	Prostatectomy			
5/8	Discharged			

on two cases that show that low stabilization of phthalein with moderately high non-protein nitrogen retention, which were operated and recovered. Both had stabilized their other body functions before operation.

CASE REPORTS

J. B. A.—white. Came to the hospital in coma after ten days of intermittent catheterization. Retention of 1200 c.c. He was carefully prepared by catheterization and a suprapubic drain over a period of fifty-seven days. He was operated under ethylene anesthesia. The patient developed a seminal vesiculitis which demanded two transfusions, but was discharged one month later.

C. C.—64—white. Came to the hospital with retention of 1500 c.c. Was put on catheter decompression and drain. This was maintained for forty-two days. He was a tall, thin man, had lost fifty pounds in weight and was markedly anemic. Prostatectomy under ethylene anesthesia and fourteen days later was discharged from hospital. When last heard of, one year ago, he had regained forty-seven pounds of his weight and was carrying on his business as a merchant.

The following case emphasizes the same point.

J. L.—62—white. Diagnosis: Prostatic hypertrophy, complete retention. Admission non-protein nitrogen 96 mgm. Admission phthalein, for two hours, none. Preoperative non-protein nitrogen 58 mgm. Preoperative phthalein, for two hours, 10 per cent. 10-15-28—Prostatectomy, Spinal anesthesia. Recovered. He is now following his occupation as a mill-worker.

These cases show that prostatic surgery can be carried out in the presence of very poor renal function.

Chart X gives the number of days of preparatory drainage. No patient in this series was operated with less than six days drain. It is much safer to err on the side of too long than too short a drain.

We have always felt that any examination of these men that would give us information before operation as to the type of obstruction and associated complications within the bladder itself as well as the kidney, would make us better prepared to cope with them at operation. We have never felt that it was wise or necessary to do a cystoscopic examination upon every patient. The examination was carried out however, in seventy-eight cases. In twenty-two for various reasons it was deemed unnecessary or there were contra-indications. The cystoscopic examination is never carried out unless as a diagnostic procedure. If we feel that physical examination is sufficient for diagnosis, we may not cystoscope our patient until he is well along in his preparation and from this procedure we have never seen bad results.

CHART X

DRAINAGE

26	prepared in	1-9 days
48	prepared in	10-19 days
16	prepared in	20-29 days
4	prepared in	30-39 days
5	prepared in	40-49 days
1	patient required	140 days

Average drain days 17.3 days.

CHART XI

BLOOD SEDIMENTATION
Study of 35 cases

Normal Sedimentation	13	
Cancer		2
Infected		5
Clean		6
Moderately Rapid Sedimentation	7	
Cancer		0
Infected		1
Clean		5
Hemorrhage and Infection		1
Rapid Sedimentation	15	
Cancer		4
Infected		8
Clean		2
Hemorrhage		1

Plain *X*-ray pictures were taken in sixty-five patients with the idea of picking up stone but more particularly were we looking for possible metastases into the bony structure from carcinoma. Eighteen cystograms were made to determine size, position and possibly diverticulae of the bladder. Pyelograms were only made in three cases and in these, to arrive at a proper diagnosis.

Blood sedimentation rate has been carried out in thirty-five cases with the hope that information gained would be of value in helping to pick up early carcinoma. It has been of very little value as infection, hemorrhage and anemia influence it so markedly. Chart XI gives the results in these cases.

Chart XII is a review of the preoperative genito-urinary complications which were encountered in these men and is fairly representative of the type of complication to be found and dealt with.

Chart XIII shows a number of physical handicaps which were presented by the same men. Eleven of them presented some type of hernia, some of which had been operated and reoperated on. It is always interesting to me to examine

CHART XII

PREOPERATIVE G-U COMPLICATIONS

Bladder Stone (single)	3
Bladder Stone (multiple)	1
Increased Cystitis	1
Pyelonephritis	10
Hydrocele (right)	1
Diverticulae (single)	2
Diverticulae (multiple)	2
Diverticulae (with stone)	1
Left Kidney Removed	1
Kidney Stone	1
Uremia	10
Epididymitis	8
Supra pubic Fistulae	3
Hydronephrosis	2
Hydronephrosis, Bilateral	3
Abscess of Seminal Vesicle	1
Previous Prostatectomy	2

CHART XIII

PREOPERATIVE ASSOCIATED CONDITIONS

Hernia, unilateral	5
Hernia, bilateral	4
Hernia, ventral	2
Asthma	2
Hemiplegia	2
Diabetes	1
Cellulitis (leg)	1
Fracture of hip	1
Cardiovascular	37
No complications	24

men past the age of sixty who have had hernial repair on the general surgical service, develop urinary difficulties and be referred to the urological department for examination. Thirty-seven of these patients were classed as some type of cardio-vascular disease. This fact points to the necessity of having a medical consultant in touch with the patient.

CHART XIV

CLINICAL DIAGNOSIS

Prostatic Hypertrophy	100
Adenomatous	70
Fibrous	21
Carcinoma ?	9

Chart XIV shows that a diagnosis of prostatic hypertrophy was made in 100 cases; in seventy-nine there was a moderate or marked enlargement of the gland as palpated per rectum; twenty-one presented very little enlargement per rectum but did show obstruction at the bladder neck in the form of a pedunculated lobe or lateral enlargement into the posterior urethra or vesicle neck. Most of these however, were of the small sclerotic type of prostate with varying amounts of hypertrophy associated. In nine cases a questionable diagnosis of carcinoma associated with hypertrophy of the prostate was made. This assumption proved true in all but one case.

Chart XV shows the pathologist's report upon the sectioned gland. Sixty-two were the adenomatous or glandular type; twenty-one were small sclerotic in type with varying amount of

CHART XV

PATHOLOGICAL DIAGNOSIS

Adenomatous	39	
Glandular	23	
Fibrous	21	83
Adeno-carcinoma (Early)	9	
Adeno-Carcinoma (Well Defined)	8	17

hypertrophy making a total of eighty-three cases of benign obstruction; nine cases of early adeno-carcinoma were found which had entirely been overlooked at the clinical examination; eight cases of moderately or well defined carcinoma associated with hypertrophy were reported. One in every six cases diagnosed as hypertrophy had a carcinomatous change.

The problem of anesthesia in prostatic patients has always been a perplexing one. In selecting an anesthetic for these old men, not only do you have to consider poor renal function but also the impaired heart, vessels and lungs. Thirty-seven per cent of these old men had some type of myocardial or endocardial disease and therefore care must be used in selecting any general anesthetic. Again, general anesthesias are more likely to give rise to complications involving the lung, particularly bronchitis and broncho-pneumonia. Ether has been condemned as an anesthetic in these patients. However, in three cases it was believed to be the anesthetic of choice because of the condition of the heart muscle. Nitrous oxide was used thirty-two times. This anesthesia carried a certain risk with it but is safer than ether. Ethylene is the ideal general anesthetic. Nine patients were operated under this anesthesia; two of them very poor risks. It has one serious drawback, it may explode from static sparks.

About one and one-half years ago we began the use of spinal anesthesia. We used Spinocain. This has proved highly successful in our hands. We have not had a fatality and neither have we had some of the desperately low blood pressures that we observed when we used the crystals of novocain. Forty-two cases have been done in this series under this anesthetic. In only two was it necessary to supplement it with any type of local or general anesthesia. Sacral anesthesia with abdominal block has been successful in six cases and three cases in which it was used it was necessary to use a general anesthetic. In three cases the abdomen and bladder were opened under local infiltration and nitrous oxide given for the enucleation of the prostate.

To summarize, we feel that ethylene is the ideal general anesthetic, that nitrous oxide ranks second and ether should very seldom if ever be used. We feel that by far the better anesthetic for all of these cases unless there be some specific contraindication, is some type of sacral or spinal anesthesia. Our preference at the present time is for spinal.

Immediately upon the removal of the gland, the first thing that should occupy the attention of the surgeon is the matter of hemastasis. Following the enucleation of the adenomatous or glandular hypertrophy that has been done along the proper lines of cleavage, hemorrhage is rarely an immediate complication that gives rise to much concern. A hemostat may be clamped on some of the bleeding points and allowed to remain for a while. Occasionally a bleeding vessel may be ligated. But we have found that if several hot sponges are packed into the prostatic bed, that most of the oozing will stop. After we are satisfied that there is no active bleeding, we have deemed it wise in eighty-three cases to pack the cavity with plain or iodoform gauze. Following this procedure we have had three cases of postoperative hemorrhage; one occurred in an elderly patient with a marked myocarditis, four hours after his operation. The hemorrhage was controlled by repacking but the patient died ten days later from his myocarditis.

In those cases in which hemorrhage was too lively to depend on the pack, either a Hagner and Pilcher bag was introduced. This occurred seventeen times. In one case, about six hours after the bag had been released, a hemorrhage occurred which was very easily controlled by drawing down the bag again. In another case, in which the bag had been used, the hemorrhage occurred on the fifth day. This hemorrhage was controlled by hot bladder irrigations, fibrinogen and morphine. Hemorrhage should be carefully controlled because these cases usually show shock quickly and recover slowly.

CHART XVI

POSTOPERATIVE COMPLICATIONS

Hemorrhoids, infected	1
Ulcers, corneal	1
Epididymitis	6
Infected wound	10
Gastric dilatation	1
Abscess of seminal vesicle (found at operation)	1
Seminal vesiculitis (transfusion)	1
Chill on voiding	10
Uremia	4
Overdose of insulin	1
Myocarditis	4
Pneumonia	3
Hemorrhage	5
Dementia	3
Mesentary Thrombosis	1
Reoperation	4
Prevesical space infection	3

While the immediate complication following operation which may cost the patient's life is hemorrhage. Chart XVI shows the number and type of complications that may add to the patient's stay in the hospital and be the proverbial straw that becomes his ultimate undoing. Most of these complications are infective in nature. Sepsis of any type must carefully be avoided as these men do not do well if they are constantly absorbing bacterial toxins.

There were ten cases of infected wound; none of these however, were a menace to the patient's life at any time. In three cases, however, associated with these, there was an infection of the prevesical space and in only one of these did we fear that we would be unable to cope with the situation. One case of abscess of the seminal vesicle opened at operation had a prolonged infected bladder urine but ultimately recovered. Another case of acute seminal vesiculitis developed in a very poor operative risk and demanded two transfusions. This infection nearly caused this man's death.

One case of infected hemorrhoids were found to be the cause of the patient running a prolonged septic temperature. He made an immediate recovery after they were resected. Epididymitis occurred in six cases. While this is a very ugly complication, at no time did it appear to be an alarming one. We have not practiced vasotomy routinely. Four patients developed a uremia following operation; one of them died. Three patients developed a pneumonia, one of which was terminal and partly responsible for a death. Postoperative dementia occurred three times and all three patients recovered. This condition must be carefully watched for, as it may simulate a uremia. However, the blood urea and non-protein nitrogen determination will be a valuable aid in making the differentiation.

Three cases in this series had had a prostatectomy elsewhere but returned to us complaining of the same symptoms for which they were operated. One of these patients had had a perineal prostatectomy eleven years before without relief. A middle pedunculated lobe was allowed to remain which acted as a ball valve. In two other cases, there had been a unilateral prostatectomy in one and in the other we believed that there had been some adenomatous tissue left at the previous operation. All adenomatous tissue should be searched for and removed at the time of operation.

We have found it necessary to reoperate four of our own cases. Two of these patients had contractures of the bladder neck and posterior urethra associated with stone formation in the bladder. One case had a complete occlusion of the vesical orifice by a thin epithelialized membrane; a bag was used in this case. Before the patient left the hospital this membrane was dissected free from the vesical orifice and he made a complete recovery. In one case, some adenomatous tissue remained and acted as a ball valve in the posterior urethra. This was exercised with a Colling's Electrotome.

Further survey of the cases reveals that in the 100 cases operated, there was not a single case of rectal injury or urinary incontinence, and no case of persistent vesico-abdominal fistulae exists except in the carcinoma cases where we made a permanent fistula.

There were four deaths in the 100 patients which had a prostatectomy. Data on these cases follow:

J. O.—72—white: Had a pedunculated middle lobe of the prostate that remained following a perineal prostatectomy eleven years previous. Myocarditis, marked; catheter drain for one month. Developed a postoperative hemorrhage; house staff deemed it necessary to open his bladder and repack. Patient died ten days later from his myocarditis.

W. P. S.—81—white: Had a large glandular hypertrophy; was in excellent physical condition for a man of his age. He had a catheter drain for twelve days previous to operation. Preoperative non-protein nitrogen, normal. Phthalein, 70 per cent, preoperative. Died two weeks later from uremia. This patient had an early stabilization of renal function and his general condition was good but we feel that we did not drain his bladder for a sufficient period of time.

G. G.—61—white: Contracture of the vesical neck with moderate hyperplasia of the prostate. Catheter drain for twenty days. Preoperative phthalein, 90 per cent. Preoperative non-protein nitrogen, normal. Eighteen days after operation developed an acute pain in abdomen and died three days later from a mesenteric thrombosis.

M. O.—75—white: Entered hospital with complete retention, bleeding badly and semi comatous. Two days later had suprapubic cystotomy; drained for thirty days. Preoperative phthalein, 50 per cent. Preoperative non-protein nitrogen, 36 mgm. Patient did well for nine days following operation; on the tenth day had a chill; developed a pneumonia from which he died two days later.

While four of these patients died either directly or indirectly as a result of prostatectomy, thirteen other patients suffering from prostatic enlargement, died before any preparation could be instituted or as the result of improper preparation instituted by us. Seven of these patients came to the hospital in coma; six died without any preparation, one had a suprapubic drain because we were unable to catheterize him. Four patients came to the hospital in uremia, three the result of intermittent catheterization before their admission, one died from the same cause after admission. Two patients with diabetes died promptly with practically no treatment. This makes thirteen patients who lost their lives because they refused operative interference, their preparatory period was poorly managed, or delay from other causes.

For economic and other reasons, patients want to know about how long they will be confined to the hospital. As this group of patients was composed of fifty-three clinical and forty-seven private cases, we will divide the data accordingly, because clinical cases were operated upon a certain day of each week, and again, many of them were held in the hospital much longer than private cases would be because of poor home surroundings, inadequate facilities for dressings, etc. The average hospital stay for all patients, was 45.5 days whereas private patients was 38 days. This time was divided as follows: Preparatory days, clinical 17.3, private 15 days. The average number of postoperative days for all was 27, for private 23 days. The fistulae were healed in all upon an average of 28 days, whereas the private patient only required 20 days. One patient in this group never had any urine escape through his abdominal incision after the tube was removed.

COMMENTS

These old men for the most part want to live. They have plans for the future and aspire to fulfill them but they will not accept surgery if they feel that they are going to be more miserable as a result of it or if it is going to cost them their lives. But, today, we feel that they can be offered a prostatectomy on the basis of comfort, increased length of life and a very small chance of death.

An operative mortality of five per cent or less is a marvelous tribute to those men who do prostatic surgery, but this is not the true picture of conditions as they exist in our hospital records. Seventeen patients died in this series of 113 cases which makes a mortality rate of 15.5 per cent. We know that these men have a better chance to live comfortably and longer following operative interference than by palliative measures. These men should be encouraged to have prostatectomies and not discouraged.

SUMMARY

1. We have recorded here 113 cases of prostatic hypertrophy with seventeen deaths; 100 had a suprapubic prostatectomy performed, with four operative deaths.

2. Records of the hospital show a mortality of 15.5 per cent from prostatic hypertrophy.

3. Early operative interference carries low mortality. Delay and catheter life accounts for a high mortality.

394 E. TOWN ST.

—Abnormal conditions of the eyes were found among 21 per cent of 982 kindergarten and nursery children examined in a four-year study of the vision of preschool age children in New York City recently completed by the National Society for Prevention of Blindness.

Plans for the establishment of quarantine stations on all airlines of the world have been drafted by the health committee of the League of Nations, according to an announcement by Surgeon General Hugh S. Cumming, U. S. Public Health Service.

A psychologist will be appointed soon to devote his full time to case work among the inmates of the Boys' Industrial School, Lancaster, according to a recent announcement of State Welfare Director Griswold. Mr. Griswold said that the results of a study among 250 selected cases at the institution last year warranted employment of a full-time psychologist there.

Health Education and the Physician

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THE rapid developments of modern science, especially those of the last fifty years, have made possible a new conception of health. Health today is considered by those who have made a careful study of it as a reasonably permanent state of physical and mental fitness in individuals resulting from the interaction of a vast number of forces or conditions, among which are heredity, diet, sleep, dress, vocation, habit, mental attitudes, immunization, housing, income, social stresses and strains, and many others. Medicine is making a rapid transition from the curative to the preventive emphasis in order to control these factors and thereby avoid broken health. Health education is the apex of the preventive program. It rests upon the faith that man himself can be taught to control many of these forces in his own life and thus increase immeasurably his efficiency and happiness.

The ideal is inspiring; it is limitless in its possibilities; it calls upon every known science for its realization, even upon some not yet developed; and it reaches into every aspect of living, both individual and social. To those who reflect seriously and long upon the matter, no modern social program seems to offer more lasting benefits to the human race than the newer health education program. If properly thought out and put into effect, it will go a long way toward helping to solve many of our most menacing social problems, such as feeblemindedness, insanity, crime, vice, divorce, child labor, women in industry, drug addiction, prohibition, poverty, prostitution, vagabondage, and many others. Perhaps the best way to get a practical view of the tasks involved in a rational health education program is to sketch the classes of people who need health training and indicate the type of instruction demanded, and then consider the agencies best fitted to deal with these classes and their demands. This involves some overlapping of thought, but it has the merit of concentrating attention upon vital and pressing realities.

Without any doubt, those persons who are in greatest need of vital health instruction are parents. Young people contemplating marriage should know something of the probable hereditary factors conditioning wholesome mating. With marriage, they should come to understand something regarding rational sex intercourse, its hygiene and regimen. With the advent of children, they should comprehend a good deal with reference to the care of infants. With the growing family there emerge limitless requirements upon the intelligence and character of father and mother. There is no adequate way of stating the importance and difficulties of engendering in children the proper habits of eating, sleeping, dressing, cleanliness, care of eyes and ears and teeth, control of emotions and attitudes, and legions of others. The guidance of the dawning sex life in children deserves special mention in this connection. Many of these problems of understanding do not stop with childhood; they become more complex and difficult with adolescence. When we add to these more or less normal problems the hosts of diseases that attack childhood and the care they entail, we get something of the picture of the practical nursing that should be the accomplishment of every home. This vast field of family health education has scarcely been attacked as yet, and no one sees its huge importance as clearly as the public health commissioner, public nurse, juvenile judge, probation officer, and social worker.

Due to the fact that the great majority of parents have little or no health training, the next class most deserving of it is the elementary school child. Most of the habits sketched above become the task of the elementary school, since parents have failed to teach them. Aside from these, the elementary school has a perfectly legitimate duty all its own. Keeping clear the fact that we are not considering here the remedial measures connected with medical inspection or the control of defect or disease, all of which are good, the elementary school owes to all of its pupils an elementary knowledge of the principles of physiology and hygiene as they are connected with personal habits and home and community sanitation.

The next class whose needs are distinctive enough to require special instruction is that of boys and girls of high school age, or that of early adolescence, ranging from twelve to fourteen years of age up to eighteen. Though now known not to be as unique an age as Hall in his famous volumes on "Adolescence" made it out to be, nevertheless it is a period fraught with great consequences for health. Here sex comes to its fullness, with an import good or bad that influences powerfully all the rest of an individual's life. Here too many other emotional stresses and strains crystallize into permanent health habits and ideals. Personality formation takes place in good part here, and many of the ideals of social well-being are rooted in the adolescent character. Here is the only age in which health can be made a religion. The high school boy and girl deserve the vision of a clean, up-standing, fine, healthy personality.

The young man and woman from eighteen to twenty-four or five marks off another class with

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special needs. There are really two classes here, one that has the means and interests that permit it college or technical training, and the other which enters industry or business. In both classes, however, two events of tremendous importance in the life of an individual take place—the entrance upon a vocation and the founding of a home. Both of these bring about far-reaching adjustments in habits and mental attitude. The competitive element assumes a new place in living, and to it is added suspense. Here technical knowledge of vocational efficiency and parenthood become the prime essentials. For those who take higher training, a rich field of sound science in physiology and psychology should be assured as a background for these essentials.

The fifth class might be called citizens in the prime of life, from twenty-five to fifty. Interest in personal health in this period is quite as important as in any other period, but it assumes different forms. The demands of vocation, family, and social life require constant reorganization of ideas and attitudes toward diet, rest, recreation, mental hygiene, habits of work, and many others of more specialized nature. The social and civic aspects of health education, however, should be given primary concern in this period. Upon citizens in the prime of life depend the responsibilities of the whole health organization of society. Every man and woman should understand the work of public health departments in nation, state, and community. They should know about all the chief agencies, public and private, devoted to health work. In a word, they should have a practical knowledge of health as a social problem. Without this, health progress is impossible, especially in a democratic society like ours. Here lies the chief reason for the niggardly support of health in all our public budgets, national, state, county and city. People build beautiful public office buildings, ornate bridges, scenic highways, great white ways, and decorative parks without murmur; but they permit health departments to be housed in old stores or office buildings with meager equipment and low-salaried staff. Tubercular cattle will get an appropriation more readily than will tubercular children. Adult health education alone can remedy these faulty evaluations.

A study of senescence and old-age problems is demonstrating that this period in life demands specialized health knowledge, and perhaps this field will get attention in the future. So little has been done thus far that no attempt will be made even to sketch a program. It was but a few years ago that infant and child health was the dark continent of medicine; today the dark continent is old age. Neither medicine nor health education can, of course, promise a victory over physical death; but they can without the slightest possible doubt ease the battle with senility.

When we turn from the objectives and programs of health education for the different groups to the agencies available for their realization, we almost instinctively think of the medical profession first. It is one of the oldest of all professions; it has a prestige unrivaled by any other; and it symbolizes at first thought in the public mind protection from ill-health. Society, it would seem, should have the right to look to physicians for sound guidance in the whole health program. In some respects, the profession has justified this faith; but in many ways it has not, perhaps necessarily so. Up to our own age, it has been engaged dominantly in the study of disease and its cure. The rank and file of its members have been engaged in private competitive practice; they have been highly individualistic; they have in many ways developed a cult rather than a great social institution. A survey of health education agencies, at least, seems to demonstrate the truth of these statements.

In the health training of parents, no one has had the opportunities for significant service that the physician has had. Excepting the priest or minister, no one has had open entrance to family life equal to his. The whole setting for vital instruction on great health matters comes to no other person as it comes to the family physician. To the student of social life, it is an inspiring dream to picture what it would mean to the human race to have every family begun, founded, and established in cooperation with a finely trained, family physician. With notable exceptions, however, the dream appears to be hopelessly unreal. The training of the physician does not fit him for health counseling in any far-reaching degree, and it seems often to develop personality qualities that are antagonistic to it. As a consequence, most families consult physicians in crises only, relying otherwise upon home remedies and patent medicines.

Education of the family in a positive health and preventive program is just now beginning through agencies other than the family physician. The Parent-Teacher Association is attacking the problem through Mothers' Clubs, pre-school child round-ups, and courses of study for parents. Child-study literature in the form of books, pamphlets, leaflets, and magazines is growing beyond all bounds. Home Economics departments are emphasizing courses in child rearing. The American Medical Association is publishing a great many pamphlets on the question, and it is issuing by all odds the finest family health magazine in the country—"*Hygeia*". This movement for parental education promises to assume large proportions and to become active in some of the pressing problems of society, such as eugenics, birth control, sex education, motion pictures, salacious literature, and others. The average physician, in spite of the progressive policies of his national society urging every promotion of health education and the establishment of a regu-

lar family physician in every home, remains supinely outside of the movement.

The elementary school is ill-equipped to carry on its part in the health education program. Today it does have an excellent course of study blocked out by the National Education Association in cooperation with the American Medical Association, but this course, or any other similar to it, is not established in any considerable number of school systems, especially in the smaller villages or rural districts. Teachers are poorly trained to give the work, and they are not enthusiastically interested in the subject. Not only is this true, but the health work as such, in the form of medical inspection and follow-up, is but very indifferently pursued in these schools. Every item of logic would lead a thoughtful citizen to expect that the medical profession would lend its great social prestige to the community and the state in the way of building a strong elementary school health program. As a class, however, physicians do not take an active interest in health matters in the school, and they rarely give Parent-Teacher Associations their services in furthering such work.

The high school is even less effective as a health education agency than the elementary school. The instruction in physiology and hygiene in the high school is perhaps the least vitalized of any subject in the curriculum. Biology, which might be made to contribute some valuable knowledge on sex, actually renders little help in this great problem of adolescence. The sociology and civics, which offer such fine possibilities for developing the social aspects of health, give comparatively little attention to it. The phase of secondary education which exalts presumably health ideals is athletics; and athletics carried on as it is today, through inter-school contests, with winning games the sole goal, is a monstrosity viewed from the health education standpoint. Physicians, better than others, know this to be true, and yet they always seem to be among the most loyal supporters of the craze. The whole health spirit of the high school is low; the dress, the parties, the interest in movies, a good many of the dramatic presentations, and the numerous "pep" meetings and excitement over athletic games,—all tend to place a wrong emphasis on matters of both body and mind. The boys and girls of these ages are neither bad nor indifferent; on the contrary, they are remarkably thoughtful and keenly sensitive to high and noble ideals. The whole social atmosphere of the high school has not been moulded by public sentiment in such a way as to elicit the best in youth. The Boy Scouts, the Girl Scouts, and the Hi-Y Clubs, all flourishing in this adolescent age, demonstrate what can be done under right leadership. A few right-minded citizens in every community could in a very few years change the whole spirit of the high school. No one class of citizens could equal the physicians in power to effect this change. The physician, therefore, ought to be a leader; but usually, he is not even an active participant.

When we come to the agencies that might serve the health building of young people between the ages of eighteen and twenty-four or five, we meet unique problems. There are probably between ten and fifteen millions of persons between these ages in our country. Not ten per cent of these enter colleges, training schools, or university. For those who do, almost the same things may be said of their health training that was said of high school pupils. No one would pronounce student life as uniquely wholesome and healthful, at least not that of medical colleges. For those who do not enter higher institutions of learning, there are few health agencies that are in any advantageous positions for service. Industry and business tend to exploit the strength of their newest and youngest workers; and comparatively few industrial establishments have health departments that go beyond examination and remedial measures. Y. M. C. A. and Y. W. C. A. organizations accomplish some very worthy health objectives with those young people who become members; but these constitute only a small percentage of the total number in the class, and many of these do not come from the ranks of those who need health direction most. On the whole, the young persons from eighteen to twenty-four or five present a very difficult problem in any comprehensive health education program. There is a certain anonymity connected with the lives of these young people. Contacts with wise and sympathetic older people are not readily made. This is true even of those in colleges; and for those who enter vocations, it is doubly true. A large number of these young people are from the country or smaller towns just beginning life in big cities. A good many find their mates in these years, and often with a recklessness and haste that lead to serious consequences later. Their comparatively rugged health does not bring them into contact with the physician, though perhaps ten per cent of them are in serious need of his services. Neither the medical departments of colleges nor those of industry have fully comprehended these problems as yet; as a matter of fact, many have not comprehended them at all.

More than one-third of our population is between twenty-five and fifty years of age. For this great group in the prime of life, no one up to our own generation thought of a health education program as such. Planned health education was conceived as a matter for children and youth. Today it is clear that the need for health instruction never ceases. Conditions of work change; social life changes; and the body and the mind change. No person can be efficient who does not make wise adjustments to these changes. Two health education agencies, with tremendous power and with superb pedagogical methods, have

played upon this group of middle-life people for centuries, and they still do. Quacks and patent medicine companies have heaped up fortunes by a method sound in its psychology but nefarious in its motive, and equally nefarious in its results. Down to the present century, the medical profession sat quietly by and never raised a voice in public against this trickery, one unexcelled in all history both for its duration and its volume of humbuggery. Today the American Medical Association has an excellent Bureau of Investigation for the detection of quackery and nostrums and for the dissemination of information regarding them. This is an admirable and courageous health education program. A layman often wonders why local physicians or local medical societies do not bring many of these findings of their national organization to their communities. It would seem to be both sound morals and good business to do so.

On the side of positive health instruction for adults, two agencies of great power are entering the field. Insurance companies are rapidly working out policies of medical examinations, health advice, and educational literature for their patrons. It is but a short step from these policies to that of comprehensive system of cooperating physicians distributed carefully over the entire country. The second agency is the American Medical Association again. It recommends a family physician for every home and regular examinations for every member, implying clearly by this that the physician is to be a health teacher as well as a curative agent. The Association is also issuing inexpensive pamphlets and books on a wide variety of health topics; such as child welfare, health plays for children, sex education, personal hygiene, public health, conservation of vision, cancer, and the like. The *"Hygeia"* magazine has been mentioned. Here is some of the very finest health education material published. How does it come about that so little of this material gets any local advertising? Many teachers in the schools have never heard of it. An insurance agent can hand his patrons pamphlets on cancer or diet or what not, but a physician never seems to do this, not even one's own family physician. In the last analysis, there is but one logical agency for the health instruction of people in the prime of life—the family physician. To meet their needs as they see them through a growing general intelligence, he will have to extend his study and interests to parenthood, and to children, as well as to the hygiene of adult living, and this all from the teacher's standpoint as well as from the physician's. People can still buy pills at the drug store; they must learn to buy the finest wares that the physician has—his knowledge and counsel on how to keep physically and mentally fit. The physician, in turn, has to make sure that he has these wares to sell.

There is still another aspect of health education that must be directed to this adult group, the civic or social aspect. The whole program of health rests upon the shoulders of this group. The men and women in active life generate the public opinion that supports the health activities of state, county, village, schools, and nation. A correct public opinion on health policies is perhaps the most important part of the whole health education program. All else rests back upon it. The great agencies for developing public opinion are the press (newspapers, magazines, pamphlets, and books), the radio, and the legions of voluntary clubs and societies (Rotary, Kiwanis, Elks, Lions, Exchange, Chambers of Commerce, and the like). Every great profession uses these agencies more extensively than does the medical profession. The American Medical Association has made an admirable and dignified beginning. Several local or state associations have started to work through the voluntary clubs and societies. The Toledo Association has just recently adopted a positive policy of furnishing speakers for these clubs on health topics. It would seem that local medical societies could be made powerful agents for moulding community opinion on health. Part of the papers read could be of a popular character and then skillfully reviewed for the press.

A great deal of sound material on such matters as hospitals, tuberculosis, cancer, heart disease, venereal disease, and many others, might be furnished the public under the auspices of the local medical society. It is true that preventive material does not today seem to make good news or interesting topics for lectures, but this is due to the fact that literary and artistic talent has not been working upon it as it has been upon other matters. There are some good beginnings in this field of artistic presentation. The posters of the National Education Association and of the American Medical Association are good; Dr. Fishbein's radio talks "get across" well; and the *"Hygeia"* magazine is a model of skillful literary presentation. The biographies of the heroes of medicine ought to be as inspiring of health patriotism as are the stories of Lincoln, Washington, and Grant of civic patriotism. Pasteur, Harvey, Koch, Jenner, Reed, Trudeau, Welch, and Osler, together with some others, are world heroes quite as worthy of honor as the heroes of war, politics, or general science.

It might be interesting to touch upon the health education problem of old age; but it is unnecessary, from the standpoint of this paper, to pursue the analysis of the general problem further. The fundamental point in any discussion of the question rests in the last analysis upon a study of social values. The final tests of any civilization are the degree to which it thinks out a scale of human values and the degree to which it organizes effort for the realization of these values. That health is one of these supreme values, today there can be no question. As yet it has not

achieved first place either in thought or effort in our civilization. In the early years of our country's history, politics assumed first place; then followed general culture education; and now perhaps industry and science top the scale of social objectives. It would seem that health in its largest and most comprehensive sense ought to come next.

An historical study of these great shifts of emphasis shows that they are primarily the result of leadership. Virile men and women grasp hold of some great human current of thought and translate it into terms that the public mind can understand. In a little while, this understanding manifests itself in laws, departments of government, voluntary organizations, and various techniques of procedure. At root, the whole process is one of education. Health seems now to be in the early stages of such an evolution. If this evolution is to proceed soundly, it will mean that homes, schools, colleges, industries, voluntary organizations, and all the agencies of public opinion must receive the wisest guidance available. The medical profession is the logical source for such guidance.

To furnish this guidance, the medical profession as a whole must become socialized. This does not mean state medicine or socialistic medicine; it means that physicians, one and all, must become clearly conscious of the social meanings and functions of their profession. The social service philosophy, freed from selfishness and sentimentality, must become the philosophy of physicians. Business has accepted the philosophy, but has largely spoiled it with the profit motive; teachers have adopted it, but without the science to give it dignity; and the ministry has always had it, but without the open-mindedness and fundamental knowledge to preserve its continuous respectability. Perhaps the medical profession can avoid these mistakes. No apology need be offered for the idealism back of these statements. The House of Delegates of the American Medical Association has stated and re-stated the social service philosophy for medicine. It permeates the thought and lives of the great physicians of modern times. Cushing in his "Life of Sir William Osler" quotes (Vol. I, P. 619) from an address made by this noted physician to medical students, from which the following sentences are taken:

"More than any other the practitioner of medicine may illustrate the ..... great lesson, that we are here not to get all we can out of life for ourselves, but to try to make the lives of others happier. * * * The practice of medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head. Often the best part of your work will have nothing to do with potions and powders, but with the exercise of an influence of the strong upon the weak, of the righteous upon the wicked, the wise upon the foolish. To you as the trusted family counsellor the father will come with his anxieties, the mother with her hidden griefs, the daughter with her trials, and the son with his follies. Fully one-third of the work you do will be entered in other books than yours."

DISCUSSION

E. R. HAYHURST, M.D., Columbus: I submit herewith the report of the Committee on Teacher Training of the Ohio Society of Sanitarians: Health should be taught in the schools of Ohio in relation to the experience of health officials, as referred to, for example, in the Appraisal Form prepared by the Committee on Administration Practice of the American Public Health Association, for Cities and also for Rural Communities (N.B.: The Appraisal Form covers health work by Health Departments, Official Agencies and Voluntary Agencies).

Methods of teaching health are matters for educators. Content and relative importance of items should be matters for visé and approval by health officials and physicians. Objectives should be jointly considered by both.

Health should be made a cardinal subject in all teacher training institutions, but it should be practical and obvious, not theoretical and unable to become a part of daily habits. Its teaching, therefore, should have the following characteristics:

Stimulating and not depressing.
Habit formation essential.
Daily practice in health habits.
Health achievements of the school child should be checked up.
The teacher should be a living example.
The teaching should be adapted to the standards of district, homes, etc.
The experimental method should be encouraged.
A sufficient health library should be present in all Normal Schools and other teacher training institutions.
Encourage parental education.
Cooperation should be had by the teacher and school authorities with school nurses and school physicians, etc.
Cooperation should be had with physical educators.
Correlation with attendance, class and mental classification.

Corrective gymnastics and diagnosis should be under the direct supervision of physicians.

The minimum training for teaching health shall consist of not less than 48 hours—or 4 hours per week for one semester—as in a course devised by the State Department of Education in its outline entitled, "The Teaching of Health and School Health Problems" (1929).

All who pursue a "minor" or a "major" in school health training should have a background in physics, chemistry, biology, and social sciences. In addition, the minimum course should consist of the following subjects and corresponding credit hours:

Subject	*Credit Hours*
Human Anatomy	4
Human Physiology	4
Pathogenic Bacteria	2
Immunity	1
Epidemic Diseases and Epidomiology	2
Community Health and its administration	2
Child Hygiene, with emphasis on habits and nutrition	5
TOTAL	20

C. D. BARRETT, M.D., Oberlin: We have just listened to a comprehensive analysis of a very

fundamental question. My own experience in a school health program has lead me to the conclusion that the school teacher is the key to the situation in health education in the schools. The nurses and physicians that may be available, no matter what their number or their ability, cannot carry on successfully a health education program by their own efforts. Without the intelligent and enthusiastic help of the capable teacher the health education is doomed.

Dr. Kohl has pointed out the different age groups and the peculiar problems in the way of health education for each. The only one of these age groups that we now have a direct means of reaching other than by physicians, is the schools through the teacher. Even for the child of school age the success of the health education program would be much more assured by the full support of the practicing physician.

Dr. Kohl has pointed out the policy of the American Medical Association and materials and publications that are supplied. With this policy and these publications he is heartily in sympathy. Dr. Kohl's criticism is that the majority of practicing physicians are not interested in health education. I believe this criticism is justified, however, physicians as a group are, I believe, no different than any other group of individuals who have had the same training and experiences. Therefore, in attempting to learn why physicians are not taking advantage of their opportunity in health education I would suggest as an answer that they have never been presented, properly this phase of the question, in their early training. It is time that our Medical Schools were teaching Health as well as Pathology. Physicians are not now trained to be educators of any kind and little emphasis is placed on health. There is of late years a half-hearted attempt to teach "prevention" and "prophylaxis" and of course "immunity", but this does not at all cover the question of positive health and a constructive program which will enable people to carry on such habits in life that will promote health. The criticism of many physicians as failing to be health educators is justified but yet there are some who are taking advantage of their opportunity as such.

Let us who are in Public Health work, and who see this question from the other side, do all we can to get the health education idea firmly rooted in our Medical Schools as well as elsewhere. Eventually the majority of physicians will be health educators in the full sense of the word. That is the dream which we all have and which some day will come true.

A Comparison of Goitres of Continental Europe and the Great Lakes Area of the United States

NORRIS W. GILLETTE, M.D., F.A.C.S., Toledo

THE medical visitor to Switzerland immediately notes the large number of goitrous women inhabitants of the country. From the age of puberty on, approximately 80 per cent of the women seen on the streets in Berne, Switzerland, have noticeable goitres, if they are counted at a time of the year when the streets are not filled with tourists. Most of these women are apparently in good health, normal in weight, and when examined carefully, are found to have a normal heart rate, a normal moisture of the skin, are normally placid in character, have no tremor of the hands, and the metabolic rate is within the range of normal. The greatest portion of these Swiss women come to operation because of pressure symptoms or for cosmetic improvement.

The elder Kocher, and De Quervain who succeeded him, describe in their literature for the greatest portion, simple colloidal goitres of various types and sizes, and the results of colloid goitres in their devastating course,—such as degenerated colloids, cystic goitres and non-toxic adenomas. It is because of the size to which they develop that De Quervain has found it necessary to develop a technique of ligating the inferior polar arteries, as well as the superior, in order to have a good hemostasis in thyroidectomy.

These thyroids enlarge in size, but have very low grade toxicity. The harm they do to the heart and the nervous system is not great, and it is only after a long period of years that it is found that the heart may become somewhat damaged and the nervous system hurt. Frequently it is difficult to tell whether the goitre has done the damage to the heart and caused dyspnea, or whether decayed tonsils and abscessed teeth are doing their share in causing damage.

The soil in the Alps region contains no iodine, nor do the vegetables which the Swiss people eat have any iodine content. It has been many times demonstrated by many experimenters that colloidal goitre is associated with iodine deficiency, and in its development cystic degeneration and adenomas occur. It, however, has never been demonstrated in what manner iodine affects the thyroid. Whether the absorbability of colloid is decreased, or whether the absorbing power of the cells of the acini for colloid is decreased, has not been shown.

We may accept the dictum of Crotti that the iodine acts as a disinfectant of the gland. However, we do know that in some way iodine powerfully affects the thyroid gland both in its construction and activity.

These Swiss people take no iodine at all for their entire lives. They are not taking it for a time and then abolishing it from their food. They are not great travelers outside of their country and remain all of their lives in their iodine free country. It is this fact that accounts for the type of goitre that the Swiss people have. The Swiss

goitre, like colloid goitres any other place in the world, develops in an iodine deficient country, and it is the type of goitre that the goitre student would expect to develop. Graves' disease is neither more nor less common than in other parts of the world.

Plummer's theory in giving Lugol's solution to those suffering with Graves' disease to reduce the toxicity is well borne out by experience with Graves' disease, but the long continued use of iodine, after a colloidal goitre has been well developed, has a tendency to increase toxicity rather than to decrease it. It is unquestionably true that iodine is a good prophylaxis against endemic goitre, but it is just as true that iodine may increase the activity of a thyroid gland after a goitre has developed far enough. The size of the goitre can be reduced by iodine, but the toxicity may increase at the same time as the gland is going down. The salvation of the goitrous inhabitants of Switzerland is that they are not obtaining iodine after the thyroid has developed into colloidal goitres.

Compared to the large number of people suffering with goitre in Switzerland, only a very small percentage come to operation and that is because the appearance of the neck, for the major part, is the only disadvantage to the individual. In a country where nearly every woman has this type of neck the disadvantage diminishes. If the goitres were toxic they would soon come to operation, however.

The children in Switzerland are being given iodine in the schools, before goitres develop, and future generations will be much freer from goitre than is the present generation. After they leave the schools, however, and use an iodine free diet, which they do at the present time, to a large extent, goitre develops.

In the Great Lakes region of the United States, and particularly in my own city, Toledo, the problem is different. There is very little iodine in the soil, and as a result the vegetables eaten do not contain it. Colloidal goitres have developed in the past in comparatively large numbers, but neither in number nor size comparable to those of the Swiss population.

We see many goitres of course that are decidedly noticeable, but we see as many that only a painstaking diagnosis reveals the fact that the thyroid is the offending organ. A small colloidal goitre has developed during and after puberty, and over a long period of years perhaps an adenoma has formed in it, which has been only mildly toxic since its origin, but either gradually or quickly has changed to its severer form. Of course, we recognize that a colloidal goitre containing no adenoma at all can become toxic, and we are seeing at the present time a larger number of this class of cases than formerly, but in them we have the microscopical pictures of dilated acini, and the whole field, infiltrated, with small round cells. The toxicity of colloidal goitre and adenoma may develop from the following causes: (1) infection in any part of the body (2) toxemias of pregnancies or other toxemias (3) unusual strain or fright and (4) the ingestion of iodine.

The change that occurs in other organs of the body, as well as the thyroid, at the time of the increasing toxicity, demonstrates that thyrotoxicosis is not a thing unto itself, but is a constitutional disease. With the removal of the fetus from a thyrotoxic female the metabolic rate is very apt to go down rather promptly, leaving in its wake, however, a thyroid gland that is potentially dangerous, not quite normal, and easily disturbed by anything that causes a thyrotoxicosis.

In the absence of iodine infectious toxemias have a potential deleterious effect on the thyroid, and yet, after the degenerated thyroid has been present for a long time and iodine is given, the metabolic rate may increase and the patient become very toxic. This is with the exception of Graves' disease in which an entirely different result seems to obtain. The increased toxicity may be slight or very severe. I have in my practice a number of patients with enlarged thyroids who were practically symptomless for years and who after taking iodine became decidedly toxic. A large portion of my patients who come to operation have been treated with iodine for varying lengths of time. At present iodine salt is used exclusively in Toledo, and as a result the children develop fewer thyroids, but those with already formed goitres are paying the penalty by becoming more toxic from the ingestion of even this small amount of iodine.

The colloid can be made to disappear by iodine ingestion but the thyroxin forming portion is still active. Many young women have been treated for a number of years with some iodine preparation and at the end of that time the thyroid was as easily demonstrable as it was at the beginning of the treatment. I believe that the promiscuous use of iodine is to be deprecated, because of the damage it can and does do. A very common occurrence is to have a woman of thirty-five, evidently suffering from thyrotoxicosis, say that she had an enlarged thyroid when she was younger, but took iodine at that time and it went away. Lately, however, she thought that it was growing somewhat again, and had been taking iodine in larger and larger amounts without diminishing the size or activity. The obvious conclusion is that the thyroid was never completely eradicated by the use of iodine. The many small and dangerous goitres we have would be less toxic if no iodine at all were taken after they were formed.

There is no adequate explanation for the way in which iodine acts on the thyroid. The strongest argument in favor of Plummer's division be-

tween toxic adenoma and Graves' disease, is the way in which iodine acts on each, being diametrically opposed in reaction. The difference in sympomatology and reaction of the thyroid in the two geographic regions mentioned lies entirely in the amount of iodine taken and when used. If the Swiss people traveled as do the Americans, from goitrous areas to non-goitrous areas they would have more toxicity than we do, for they would then take iodine after the goitres had formed and the taking of iodine would incite many of them to activity. The use of iodine salt in our neighborhood is intoxicating many of our thyroid sufferers whose goitres otherwise would remain quiescent. The prophylactic good, however, probably outweighs the damage it is doing. Iodine is obtained at intervals by goitre sufferers from vegetables and fish imported from iodine containing areas and from ingestion of food and water when people are traveling in parts of the country that contain an iodinized soil.

320 MICHIGAN STREET.

Committee Appointments, Preliminary Annual Meeting Details, and Other Matters Decided at Council Meeting July 13, 1930.

COUNCIL MINUTES

The Council of the Ohio State Medical Association met in the headquarters office, Columbus, at 1:00 P. M., on Sunday, July 13, 1930.

The officers and councilors present were: Drs. Waggoner, Houser, Platter, Caldwell, Huston, Klotz, Slosser, Cummer, Stevenson; Dr. Alcorn, Chairman of the Policy Committee; and Executive Secretary Martin and Assistant Executive Secretary Nelson.

In the absence of Dr. Goodman, the Secretary of Council, President Waggoner appointed Dr. Cummer as Secretary Pro Tem for this meeting.

The minutes of the Council meetings held during the Annual Meeting of the State Association Monday evening, May 12, and Wednesday afternoon, May 14, 1930, (published on pages 532 to 535 of the June, 1930, issue of *The Journal*) were read and on motion seconded and carried, were approved.

Committee Appointments

Dr. Waggoner, the President, announced the appointment of the following committees (in addition to the standing committees appointed and confirmed by the House of Delegates during the Annual Meeting):

Council Committee on Auditing and Appropriations

S. J. Goodman, Chairman, Columbus
E. R. Brush, Zanesville
John A. Caldwell, Cincinnati.

Council Committee on Program for 1931 Annual Meeting

D. C. Houser, Chairman, Urbana
D. J. Slosser, Defiance
S. J. Goodman, Secretary, Columbus.

SPECIAL COMMITTEES

Mental Hygiene Committee

C. W. Stone, Chairman, Cleveland
E. J. Emerick, Columbus
O. O. Fordyce, Toledo
Wm. H. Pritchard, Columbus
T. A. Ratliff, Cincinnati.

Periodic Health Examinations Committee

B. J. Hein, Chairman, Toledo
C. W. Brown, Lancaster
Kelley Hale, Wilmington
M. V. Replogle, Bryan
V. C. Rowland, Cleveland.

Military Committee

H. H. Snively, Chairman, Columbus
John L. Beach, Seville
Byron Bing, Pomeroy.

The Council approved the foregoing appointments.

Constitutional Conformity

Pursuant to the amendment and revision of the Constitution and By-Laws of the Ohio State Medical Association at the 84th Annual Meeting in Columbus, May 13, 14 and 15, 1930, President Waggoner, upon authorization of the House of Delegates, announced his appointment of a Council Committee on Conformity, to formulate and suggest to the component county societies and academies of medicine uniform provisions in a model local constitution in harmony with the provisions of the Constitution and By-Laws of the State Association.

President Waggoner announced the appointment of the following Council committee on Constitutional Conformity:

Albert H. Freiberg, Chairman, Cincinnati
C. L. Cummer, Cleveland
E. B. Shanley, New Philadelphia.

In the absence of Dr. Freiberg, the Chairman of the foregoing committee, Dr. Cummer reported that the committee, since the Annual Meeting and since its appointment by the President, had formulated a suggested model constitution for component county medical societies and academies and had transmitted it together with a communication and suggestions for procedure under date of July 8, 1930, to the presidents and secretaries of the component county societies, and accompanied by a pamphlet containing the recently revised Constitution and By-Laws of the State

Association. He suggested to the councilors that they use their efforts in the counties in their respective districts in seeing that local constitutions are adopted or amended within the constitutional time limit and in conformity with the Constitution and By-Laws of the State Association. He also reported on plans of the committee in handling the numerous details in connection with this procedure.

Annual Meeting Matters

The President called attention to the necessity for determining preliminary plans and dates at this time for the 1931 Annual Meeting of the State Association and requested comments and suggestions from the councilors for the guidance of the Program Committee and the Committee on Arrangements of the Council. He also called attention to the detailed financial statement of the 1930 Annual Meeting which had been mailed to the councilors with the May monthly financial statement of the State Association.

After considerable discussion and suggestions, on motion by Dr. Caldwell, seconded by Dr. Cummer and carried, the Council decided to limit the 1931 Annual Meeting to two days and to eliminate the session heretofore held on Thursday morning.

It was the general sentiment of councilors, as expressed in the discussion, that the opening general session immediately preceded by the House of Delegates, should be held on Tuesday morning of the Annual Meeting; that the six separate scientific sections should hold their sessions on Tuesday afternoon and Wednesday morning; that at a general session on Tuesday evening, the annual addresses of the President and President-Elect should be presented; that the second session of the House of Delegates be held early on Wednesday afternoon, to be followed at 3:30 by a general session for the presentation of the scientific orations, and that a general session be held on Wednesday evening for additional scientific presentations by out-of-state guests, or combined with a presentation of economic and social questions, this latter session to take the place of the session heretofore held on Thursday morning.

President Waggoner called attention to the fact that it is customary for a Council committee to inspect and check up on the facilities of a city selected for the Annual Meeting and to make certain that the details and facilities available are adequate for the Annual Meeting.

On motion by Dr. Cummer, seconded by Dr. Slosser and carried, the Council authorized and instructed the President to appoint such a committee for this purpose, pursuant to which President Waggoner appointed: Dr. Cummer, Chairman; Dr. Brush, Dr. Shanley and the Executive Secretary.

On motion by Dr. Klotz, seconded by Dr. Huston and carried, the Council set the Annual Meeting dates for Tuesday and Wednesday, May 12 and 13, 1931.

Dr. Houser, Chairman of the Council Program Committee, reported on a meeting held on the morning of this day and made a number of suggestions for revision of the general schedule along the lines set forth above in the discussion by councilors. He invited the suggestions of the councilors for the guidance of his committee in the issuance of invitations to out-of-state speaker-guests and for other details. Dr. Slosser, a member of the committee, called attention to the fact that the Program Committee, in its instructions to section officers, should emphasize the desirability of formulating scientific section programs of general interest and particular appeal to the majority of the members in general practice. These various suggestions were approved.

Medical Economic Questions

President Waggoner reported on a meeting of the Medical Economics Committee held in Detroit, June 25, 1930, during the Annual Meeting of the A. M. A. He also called attention to the action of the House of Delegates of the State Association at the recent Annual Meeting in Columbus, on Resolution D (page 527 of the June, 1930, issue of *The Journal*) pertaining to workmen's compensation problems.

On motion by Dr. Cummer, seconded by Dr. Klotz and carried, the President was requested to appoint a "Sub-Committee of the Medical Economics Committee" as contemplated in that resolution, pursuant to which the President announced the appointment of the following committee:

A. B. Brower, Chairman, Dayton
H. S. Davidson, Akron
A. G. Cranch, Cleveland.

President Waggoner reported on the deliberations of the Medical Economics Committee concerning laboratory practice and the service rendered by the State Department of Health Laboratory, and referred to the action of the Council in submitting this question to the Medical Economics Committee (page 533 of the June, 1930, issue of *The Journal*). He also reported on the proposal to hold a joint meeting with a committee of the Ohio Society of Clinical and Laboratory Diagnosis, to be followed by a conference with the State Director of Health and other officers of the State Department of Health.

Reference was made to the House of Delegates action on Resolution H, pertaining to contract practice (page 528 of the June, 1930, issue of *The Journal*). In this connection, the President reported on the action of the House of Delegates of the A. M. A. in authorizing the creation of a Bureau of Medical Economics of the A. M. A., for the purpose of assembling authoritative data from throughout the country and for assistance to and guidance of the medical economics committees of the constituent state associations. In

this connection, reference was also made to developments in the medical service system in the coal mining section in Belmont County and other communities in Eastern Ohio.

A supplementary report was also made on the activities in the Tiffin Board of Health and vaccination problems in that community, following the adoption of Resolution J by the House of Delegates of the State Association (pages 528, 532 and 533 of the June, 1920, issue of *The Journal).*

Narcotic Questions

Attention was called to the action of the House of Delegates of the State Association on Resolution E, introduced by Dr. Stevenson, relative to narcotic regulations (page 527 of the June, 1930, issue of *The Journal).* Various members of Council discussed this general situation. Attention was called to the rather comprehensive article on narcotic regulations published on pages 341 and 342 of the April, 1930, issue of *The Journal,* as well as to preceding citations to *The Journal* in recent years bearing on this subject.

Attention was also called to the cooperation of the Bureau of Legal Medicine and Legislation, and of a special committee of the A. M. A., with federal departments in the formulation and promulgation of regulations pertaining to narcotics and medicinal liquor.

The President announced that if there is no objection, he would not appoint a special committee on narcotics at this time. There being no objections, no committee was appointed.

Questions of Expert Testimony

The President called attention to Resolution K, adopted by the House of Delegates of the State Association pertaining to expert testimony in cooperation between the Cleveland Academy of Medicine, the Cleveland Bar Association, the Ohio State Medical Association and the Ohio State Bar Association. He also called attention to the action on the resolution on page 530 of the June, 1930, issue of *The Journal.* He reported that that resolution had been officially transmitted to the Ohio State Bar Association prior to its annual meeting this past week. It was assumed that proper legislative bills on this subject would be formulated and sponsored through the Cleveland Bar Association.

Ohio's Part in the A. M. A. Meeting

The President reported in detail on the prominent part by Ohio members in the A. M. A. He called attention to the reelection of Dr. Upham to the Board of Trustees, and the reelection of Dr. Follansbee to the Judicial Council of the A. M. A. He stated that Ohio was represented by over ten per cent of the entire attendance at the A. M. A. meeting. He announced that a summary of Ohio's activities at that meeting would be published in the forthcoming issue of *The Ohio State Medical Journal.*

Mental Hygiene Problems

Attention was called to the reference by the Council to the Policy Committee, of communications and recommendations from the Ohio Mental Hygiene Association and the Mental Hygiene Committee of this Association (page 534 of the June, 1930, issue of *The Journal).*

Dr. Alcorn, Chairman of the Policy Committee, reported on the deliberations by his committee on this question and called attention to Resolution A, adopted by the House of Delegates of the Ohio State Medical Association (page 526 of the June, 1930, issue of *The Journal)* wherein the Council, while instructed to cooperate with other individuals and agencies "on definite programs which are in accordance with our established policies of medical organization and which activities have met the approval of the medical profession generally", had definitely "disapproved of any action by the officers, Council and standing and special committees of the Ohio State Medical Association which might be construed as placing the State Association officially on record as approving or endorsing any outside independent agency, organization or association over which medical organization does not have direct guidance".

In view of the action of the House of Delegates, it was pointed out that the Council could not "officially recognize and approve the newly organized Ohio Mental Hygiene Association" as previous recommended by the Mental Hygiene Committee of this Association.

It was the sense of Council, however, that the Ohio State Medical Association, through its Committee on Mental Hygiene, might well continue its contact and cooperation with the Ohio Mental Hygiene Association and other agencies constructively interested in the numerous problems of mental hygiene which have been given attention by the committee for a number of years.

A Medical Defense Problem

Correspondence was submitted between Dr. Tuckerman, the Chairman of the Medical Defense Committee, and the headquarters office, in relation to a bill submitted by a physician member for expert testimony in the case of a suit for alleged malpractice against a fellow member in the same community.

Attention was called to the request from Dr. Tuckerman for a ruling by the Council on this matter, also to Dr. Tuckerman's comment to the effect that: "The medical defense folder, section 10 and 11, states quite clearly why members of the local society should not expect remuneration for services when rendered within the home county".

Attention was also called to the following paragraphs of the rules and regulations of the Medical Defense Committee:

"The Association will not contribute the ex-

pense of witnesses residing within the county, nor will it contribute judgment or fine awarded or imposed by the jury or court.

"It should be understood by members of the Association that the amount for medical defense is not large and consequently it should be conserved by every effort on the part of the membership of the Association.

"It should be understood that members of the local society will be expected to give not only their moral support, but also active participation in the conduct of the trial in any way they may best assist, such service to be without thought of pecuniary returns."

Members of the Council discussed this matter at some length and emphasized the importance of adhering to the principle that members, as expert witnesses in medical defense suits against fellow members, should not expect remuneration for such service. Attention was also called to the fact that insurance companies which issue malpractice insurance policies to physicians, might expect to increase the premium for such insurance unless the custom of no fees for expert testimony is adhered to. It was further pointed out that this principle is especially applicable in those cases where the defendant member does not carry malpractice indemnity insurance, but is defended by the Medical Defense Committee of the State Association.

On motion by Dr. Caldwell, seconded by Dr. Slosser and carried, the Council ruled that the rules and regulations of the Medical Defense Committee (quoted above) and the precedent of allowing no fees for expert testimony to fellow members in malpractice suits, should be adhered to.

Policy and Legislative Matters

Dr. Alcorn, the Chairman of the Committee on Public Policy, reported informally, but in detail, on a meeting of the committee on the morning of this day at which consideration was given to numerous prospective legislative problems. He announced that the committee did not recommend any change or reversal of any of the fundamental policies previously adopted in relation to general issues or proposals. He called attention to the bulletin of June 19, 1930, issued by his committee to the legislative committeeman in each of the component county medical societies. He reported that his committee had decided to distribute copies of the brown legislative pamphlet (issued two years ago) to the incoming members of the Legislature, setting forth fundamental principles and the general attitude and policy of the medical profession and medical organization toward various types of legislation on public health, public welfare and medical practice; this pamphlet to be distributed with an explanatory letter. He emphasized the importance of the members taking an interest in public affairs and anticipated a number of involved legislative questions which would come before the next session of the Legislature.

Attention was called to the efforts of the National Educational Association in advocating a department of education in the federal government, with a secretary of education in the President's Cabinet. A report was also submitted on a suggestion which had been made for combining public welfare functions of the federal government in a department of "Education and Public Health". Various objections were expressed to such a combined department and attention was called to a communication received from the Bureau of Legal Medicine and Legislation of the A. M. A. under date of July 2, 1930.

A report was made on a recent conference held in Columbus on May 22, 1930, attended by representatives of various statewide organizations interested in a proposal "for the reform of county government". It was announced that various suggestions and conflicting viewpoints emanating from several groups were under consideration by a sub-committee to draft a proposal and that until the content of such a proposal is announced, that no formal action can be taken.

Miscellaneous

A membership tabulation to date submitted to the Council showed that 5348 members are now in good standing for 1930, as compared with 5400 on the same date last year, and as compared with 5528 at the end of 1929.

On motion by Dr. Klotz, seconded by Dr. Stevenson and carried, the Council, in conformity to custom, authorized the acceptance of proportionate dues for NEW members only for the remainder of the calendar year from July 1 to December 31, of $3.00 per capita, and proportionate dues of $2.00 for NEW members only from October 1 to December 31, inclusive.

There was submitted for the information of the Council a communication under date of June 17, 1930, from the Executive Secretary of the Ohio Public Health Association, referring to the 29th annual meeting of the Ohio Public Health Association held in Columbus on June 3, 1930, and accompanied by a copy of a general resolution adopted at that meeting setting forth policies pertaining to legislation and governmental administration in the field of public health. This communication was discussed by members of Council and referred to the Policy Committee.

Attention was called to the illness of Dr. L. L. Bigelow, and a report was submitted on his condition. On motion by Dr. Caldwell, seconded by Dr. Klotz and carried, the Council instructed the Executive Secretary to transmit greetings from the Council to Dr. Bigelow with expressions of cordial interest and best wishes for his early recovery.

On motion, the Council adjourned to meet on Sunday afternoon, October 5, 1930, in the headquarters office, Columbus, Ohio.

C. L. CUMMER, M.D.,
Secretary of Council Pro Tem.

Ohio Physicians Figured Prominently in the Detroit Session of the A.M.A. Dr. Upham and Dr. Follansbee Reelected to High Positions

Eighty-first annual meeting of the American Medical Association held in Detroit, June 23-27, will go down in history as one of the most important, as well as one of the most interesting and successful gatherings ever held by the medical profession of America.

Veterans of A.M.A. meetings were practically unanimous in their opinion that the Detroit meeting equalled in point of interest and importance any gathering held by the Association during the past decade.

The medical profession of Ohio took one of the most prominent parts in the five-days meeting. Approximately 580 Ohio physicians and Fellows of the A.M.A. registered during the meeting, the total Ohio registration being greater than 10 per cent of the total registration—5016.

Many of the outstanding essays, discussions and scientific exhibits presented at the meeting were contributed by Ohio physicians and the Ohio delegation took one of the leading roles in the proceedings of the House of Delegates.

Ohio was highly honored in the re-election of Dr. J. H. J. Upham, Columbus, to the Board of Trustees for a term of five years, and the re-election of Dr. Geo. Edw. Follansbee, Cleveland, as a member of the Judicial Council for a term of five years.

Both Dr. Upham and Dr. Follansbee, whose long, faithful and prominent service in medical organization was properly recognized by the House of Delegates in the selection of them to again fill the important offices they have held for a number of years, took leading parts in the business matters which came before the gathering.

Dr. Upham, in his position as a trustee, took part in the consideration of several vital questions referred to the Board of Trustees by the House of Delegates for its suggestions and counsel. He also served on the Committee on Scientific Exhibit of the Board of Trustees which deserves a large share of the credit for the high caliber of the scientific exhibit, judged by numerous physicians as one of the finest ever presented by the A.M.A.

Coincident with his reelection to the Board of Trustees of the A. M. A., Dr. Upham was informed of his election as a member of the National Board of Medical Examiners for a term of six years. He is also a member of the Ohio State Medical Board.

Dr. Follansbee, as chairman of the Judicial Council, presented the annual report of the Council to the House of Delegates and as a member of the Ohio delegation rendered valuable service to the House of Delegates in advising it on several complex legislative and constitutional matters brought up for discussion.

Not only Dr. Follansbee, but the other members of the Ohio delegation in the House of Delegates—Dr. C. W. Waggoner, Toledo; Dr. Wells Teachnor, Sr., Columbus; Dr. Ben R. McClellan, Xenia; Dr. E. R. Brush, Zanesville; Dr. J. P. DeWitt, Canton, and Dr. C. E. Kiely, Cincinnati,—took prominent parts in the business affairs of the annual meeting.

Dr. Waggoner served as a member of the House of Delegates Reference Committee on Hygiene and Public Health. Dr. Teachnor was one of the judges of election. Dr. McClellan, whose long years of service as an official representative from Ohio in the House of Delegates have won for him the esteem and confidence of his colleagues from all parts of the nation, brought further honor to Ohio in the dignified manner in which he presented the name of Dr. Upham as a nominee for reelection to the Board of Trustees.

An unprecedented amount of vital and important business pertaining to public health, medical practice, medical organization and many phases of the social, legal and governmental questions and problems affecting medical practice and public health was transacted by the House of Delegates.

The serious consideration being given and the deep interest being shown by the medical profession generally in the many complex and complicated questions pertaining to medical service and public health which have arisen within the past few years were manifest in the discussions and actions of the House of Delegates.

Members of that governing body faced and handled the important questions presented to them in a serious, courageous and intelligent manner. Definite and forceful action was taken on those questions deemed detrimental to the public's health and welfare and injurious to the economic security of the medical profession. Concerted and enthusiastic action was taken on matters judged to be beneficial to the public and advantageous to the advancement of scientific medicine and the economic and social standards of the profession.

Dr. Edward Starr Judd, surgeon of the Mayo Clinic, Rochester, Minn., was chosen president-elect at the final session of the House of Delegates. Dr. Judd is professor of surgery in the Post-Graduate Medical School of the University of Minnesota, which position he has held since 1918 and is a surgeon on the staff of St. Mary's

Hospital, Rochester, Minn. He has been secretary and chairman of the Section on Surgery of the American Medical Association and for many years was a member of the Council on Scientific Assembly.

Among other officers elected were: Vice president, Dr. Louis J. Hirschman, Detroit; secretary, Dr. Olin West, Chicago (re-elected); treasurer, Dr. Austin A. Hayden, Chicago (re-elected); speaker of the House of Delegates, Dr. Frederick C. Warnshuis, Grand Rapids, Mich. (re-elected); vice speaker of the House of Delegates, Dr. Albert E. Bulson, Fort Wayne, Ind. (re-elected); trustee for five years, Dr. Joseph A. Pettit, Portland, Ore.; trustee for one year to fill the unexpired term of the late Dr. Charles W. Richardson, Washington, D. C., Dr. Thomas S. Cullen, Baltimore, Md.

At the time he nominated Dr. Follansbee to the Judicial Council—which nomination was most strongly and enthusiastically affirmed by the House of Delegates—Dr. William Gerry Morgan, Washington, D. C., incoming president of the A.M.A., named Dr. Charles E. Humiston, Chicago, as a member of the Council on Medical Education and Hospitals, succeeding Dr. Louis B. Wilson, Rochester, Minn., and Dr. Frank Smithies, Chicago, as a member of the Council on Scientific Assembly, succeeding Dr. J. Shelton Horsley, Richmond, Va.

The House of Delegates voted to hold the Eighty-Second Annual Session of the A.M.A. at Philadelphia.

A number of governmental and legislative questions pertaining to public health and medical practice were acted upon by the House of Delegates through the adoption of resolutions.

The previous policy of organized medicine opposing legislation designed to revive the old Sheppard-Towner maternity and infancy act or similar legislation was reaffirmed through the adoption of a resolution condemning paternalistic and subsidized federal legislation of this nature.

A vigorous protest was made against the use of the radio channels of the nation by quacks and health imposters. The resolution which requested the Federal Radio Commission to take immediate steps to remedy this situation, was similar to a resolution adopted by the House of Delegates of the Ohio State Medical Association at its meeting in Columbus, May 13, 14 and 15.

The House of Delegates authorized the formation of a Council on Medical Economics, whose functions will be to investigate conditions of medical economics and to suggest means and methods by which the same may be improved or corrected.

Among Ohio physicians who took part in meetings of the various A.M.A. committees and councils held during the Detroit gathering were Dr. Torald Sollmann, Cleveland, and Dr. H. N. Cole, Cleveland, members of the Council on Pharmacy and Chemistry, and Dr. Roger S. Morris, Cincinnati, a member of the Council on Scientific Assembly.

Two Ohio physicians served as officers of scientific sections. Dr. William V. Mullin, Cleveland, was a member of the executive committee of the Section on Laryngology, Otology and Rhinology, and Dr. Walter G. Stern, Cleveland, was a member of the executive committee of the Section on Orthopedic Surgery.

Ohio physicians who took part in the scientific sessions as essayists or discussants were:

Arthur H. Bill, Cleveland; Torald Sollmann, Cleveland; Joseph T. Wearn, Cleveland; W. C. Stoner, Cleveland; L. Jackson Blair, Cleveland; Carl R. Steinke, Akron; Robert Cofield, Cincinnati; M. A. Blankenhorn, Cleveland; T. E. Jones, Cleveland; Eslie Asbury, Cincinnati; John P. Gardiner, Toledo; William D. Fullerton, Cleveland; Robert L. Faulkner, Cleveland; Albert L. Brown, Cincinnati; Mary Knight Asbury, Cincinnati; Henry M. Goodyear, Cincinnati; Samuel Iglauer, Cincinnati; William V. Mullin, Cleveland; A. B. Brower, Dayton; Howard T. Karsner, Cleveland; Alan Richards Moritz, Cleveland; Charles T. Way, Cleveland; John A. Gammel, Cleveland; E. E. Ecker, Cleveland; Howard J. Parkhurst, Toledo; Robert E. Barney, Cleveland; Carey P. McCord, Cincinnati; W. E. Lower, Cleveland; J. J. Kurlander, Cleveland; James A. Dickson, Cleveland; Walter G. Stern, Cleveland; J. A. Freiberg, Cincinnati; Ralph G. Carothers, Cincinnati.

Dr. Howard T. Karsner, Cleveland, was one of the guest demonstrators in the Fresh Pathology Exhibit, one of the features of the Scientific Exhibit.

The following Ohio physicians were among about 75 physicians who aided in the continuous demonstrations in connection with the Scientific Exhibit:

Drs. Robert and Ralph Carothers, Cincinnati; Harold R. Conn, Akron; James A. Dickson, Cleveland; J. A. Freiberg, Cincinnati; John A. Judy, Dayton; M. Jennings King, Wellsville; and E. H. Wilson, Columbus.

The special exhibit and demonstrations of biochemical diagnostic methods was staged by a special committee chosen by the Committee on Scientific Exhibit. Ohio physicians on this special committee were: Drs. V. C. Myers, Cleveland; R. F. Hanzal, Cleveland; Edward Muntwyler, Cleveland, and C. T. Way, Cleveland.

Other Ohio physicians who participated in the Scientific Exhibit were: H. L. Reinhart, Columbus; W. N. Taylor, Columbus; Otto Glasser, Cleveland; Myron Metzenbaum, Cleveland, and Thomas J. Hill, Cleveland.

Ohio physicians also took active parts in many of the unofficial functions in connection with the annual meeting and in the gatherings of professional and scientific societies and associations.

At the fifteenth annual meeting of the American Association of Industrial Physicians and Surgeons held on the first day of the A.M.A. meeting, Dr. D. B. Lowe, Akron, was elected first vice president. Among the directors elected by the association were: Dr. C. D. Selby, Toledo, and Dr. Sidney M. McCurdy, Youngstown.

Two Ohio physicians upheld the honor of Ohio in the annual golf tournament staged on the opening day of the meeting. Dr. Carl A. Hyer, Columbus, took second in the Golden State trophy, awarded for low gross score for 18 holes, with a score of 81, being nosed out by one stroke by Dr. H. K. Nicoll, Chicago, the winner. Dr. J. P. DeWitt, Canton, won second prize in the Minneapolis trophy handicap event. Dr. DeWitt was also a member of the team representing the Section on Surgery which won first place in the team championships.

Registration

Ohioans registered at the meeting included:

Akron: (26) D. C. Brennan, J. M. Canter, Floyd H. Cook, M. J. Gibans, K. H. Harrington, James G. Kramer, D. B. Lowe, W. D. Lyon, Jos. L. McEvitt, Samuel E. McMaster, J. S. Millard, R. C. Newman, G. K. Parke, M. J. Pierson, F. C. Potter, F. M. Rankin, U. D. Seidel, John H. Selby, Jay D. Smith, J. E. Springer, Carl E. Steinke, D. W. Stevenson, Arthur D. Traul, J. M. Ulrich, E. A. Weeks, L. A. Witzeman.

Canton: (18) A. R. Basinger, H. H. Bowman, A. H. Calhoun, John P. DeWitt, G. A. Kelley, F. G. King, E. J. March, E. O. Morow, C. M. Peters, C. A. Portz, R. K. Ramsayer, H. M. Schuffell, L. D. Stoner, R. L. Thompson, Homer V. Weaver, H. Welland, Geo. F. Zinninger, Pauline Zinninger.

Cleveland: (109) Paul G. Albrecht, Herman S. Applebaum, E. A. Bailey, N. S. Banker, Robert E. Barney, George I. Bauman, Fred Beekel, Arthur H. Bell, Samuel S. Berger, S. L. Bernstein, Louis E. Blachman, C. A. Black, Jackson Blair, Marion A. Blankenhorn, C. A. Bowers, Edw. J. Braun, A. L. Brooks, Wm. E. Bruner, Abram B. Bruner, Clarence J. Buckley, W. P. Chamberlain, Wm. M. Champion, J. E. Cogan, Milton B. Cohen, Harold S. Cohn, Morris Coplan, Wilbur S. Crowell, Clyde L. Cummer.

Laura Dasef, Henry F. DeWolf, Ralph S. Dial, Robert J. Dial, James A. Dickson, Robert S. Dinsmore, Wm. W. Donaldson, Frank J. Doran, E. P. Edwards, Louis J. Eisenberg, Clarence W. Engler, Warren C. Fargo, John P. Farson, Harold Feil, J. Edgar Fisher, M. H. Fineberg, Geo. Edw. Follansbee, A. N. Freed, Wm. D. Fullerton, A. F. Furrer, John A. Gammel, Wm. J. Gardner, Chas. H. Garvin, E. Gauly, Thomas H. George, Frank S. Gibson, A. B. Grossman, Proctor H. Hay, C. H. Heyman, Chas. C. Higgins, F. W. D. Finke, Mark W. Jacoby, Henry J. John, Thomas E. Jones, Howard T. Karsner, F. J. Kern, O. P. Kimball, E. Klaus, Benjamin Kline, Paul H. Krebs, Jos. J. Kurlander, Geo. L. Lambright, Francis G. Leonard, S. C. Lind, Harry A. Lipsom, Wm. E. Lower.

Sarah Marcus, Chris. C. McClure, Myron Metzenbaum, Paul G. Moore, Cecelia K. Morris, Wm. V. Mullin, E. W. Netherton, John O. Osmond, Conrad Ottelin, Lawrence A. Pomeroy, John E. Rauschkolb, Harry L. Renhart, E. F. Romig, A. D. Ruedemann, A. G. Schlink, H. A. Schlink, Oscar M. Shirey, Mortimer L. Siegel, Torald Sollmann, Lorna M. Spenzer, Walter G. Stern, R. E. Stiffel, G. W. Stober, Willard C. Stoner, Abraham Strauss, J. J. Thomas, John A. McVean, Justin M. Waugh, Chas. T. Way, Joseph T. Wearn, Beulah Wells, Charles S. Woods, Hesler H. Wyand, Anna M. Young.

Cincinnati: (37) Floyd P. Allen, E. Asbury, Clarence W. Betzner, Albert L. Brown, Samuel Brown, Wm. Brueggeman, Ben L. Bryant, Ralph G. Carothers, Robert Carothers, R. B. Cofield, Stephen E. Cone, S. Bertha Dauch, Joseph A. Freiberg, Ralph W. Good, Henry M. Goodyear, J. Victor Greenebaum, Albert L. Haas, W. D. Haines, Charles E. Hauser, Mortimer Herzberg, Carl Hiller, Elizabeth Hocker, Samuel Iglauer, Arthur L. Knight, C. E. Kiely, Inez Lapsley, Geo. W. McClure, Helena T. Ratterman, Harold G. Reineke, Bernard A. Schwartz, H. L. Stitt, Emil R. Swepston, Elmore B. Tauber, Esther Bogen Tietz, Hiram B. Weiss, C. E. Wooding, Mendel Zeligs.

Columbus: (51) A. A. Ahn, Shirley Armstrong, H. A. Baughn, E. H. Baxter, Casper H. Benson, Donald F. Bowers, H. O. Bratton, W. H. Cleveland, J. J. Coons, Morgan C. Davies, A. D. Echert, S. D. Edelman, John P. Farson, Jonathan Forman, F. F. Gallen, H. D. Giles, Emilie Gorrell, F. W. Harrah, Emery R. Hayhurst, E. D. Helfrich, Arthur G. Helmick, Carl A. Hyer, W. D. Inglis, Louis N. Jentgen, George W. Keil, Oliver E. Kline, F. F. Lawrence, E. F. McCampbell, C. W. McGavran, Geo. B. Nessley, W. E. Obetz, Ralph B. Payton, A. A. Peasley, H. M. Platter, Wm. H. Pritchard, Edward Reinert, Harry L. Reinhart, J. A. Riebel, Louis J. Roth, Daniel G. Sanor, Ernest Scott, C. H. Solomonides, Edwin J. Stedem, Wm. N. Taylor, Wells Teachnor, Sr., J. H. J. Upham, Thomas A. Vogel, John W. Wilce, Perry W. Willey, Ida M. Wilson, E. Harlan Wilson.

Dayton: (31) S. H. Ashmun, R. H. Bachtell, E. E. Bohlender, L. G. Bowers, A. B. Brower, Wm. B. Bryant, Charles E. Burgett, Homer D. Cassel, Marion W. Coleman, M. E. Coy, T. H. Dickinson, H. V. Dutrow, Gertrude Felker, C. D. Fife, Guy G. Giffin, H. C. Haning, H. W. Harris, J. A. Judy, P. H. Kilbourne, Albert F. Kuhl, E. F. McSherry, E. J. Meckstroth, J. W. Millette, T. E. Newell, P. H. O'Hara, Benedict Olch, F. C. Payne, E. W. Shank, Clement D. Smith, Henry Snow, R. K. Welliver.

Toledo: (115) A. S. Avery, Paul R. Badger, Carl H. Bayha, Horace K. Beckwith, Edward Binzer, Ralph E. Boice, H. J. Bolinger, George W. Bond, Malcolm G. Bourne, Lyman A. Brewer, A. A. Brindley, Henry D. Brown, N. Worth Brown, O. W. Burkholder, Chas. A. Burritt, Ralph M. Burton, Ernest W. Campbell, Amon E. Canfield, Lewis R. Carr, Benjamin H. Carroll, Burt G. Chollett, Francis C. Clifford, C. B. Cole, Harry G. Conn, Monroe Cronstine, Robert B. Curl, C. J. Czarnecki, H. W. Dachtler, B. E. DeMuth, Martin W. Diethelm, Leo P. Dolan, Florian A. Domalski, Berman S. Dunham, G. W. Dunlap.

Leo V. English, Paul R. Ensign, Karl D. Figley, John Gardner, Will Gardiner, E. B. Gillette, Louis Ginsburg, Lawrence C. Grosh, Oscar Hasencamp, Earl Heilner, Barney J. Hein, S. S. Hindman, Christel A. Hiss, George M. Hite, Paul Hohly, Paul M. Holmes, H. F. Howe, Earl W. Huffer, D. E. Hunter, C. O. Imoberstag, A. P. R. James, Dalton Kahn, B. A. Karwowski, Philip Katz, J. Lester Kobacker, John L. Lavan, Henry R. Lesser, L. A. Levison, Charles Louy, John A. Lukens, James A. H. Magoun, L. K. Maxwell, Wm. F. Maxwell, Edw. J. McCormick, E. J. McKesson, Clovis L. McKibben, Chas. A. McNeil, Laurence D. Miller,

Edmund C. Mohr, Paul H. Moore, T. W. Morley, Nelson D. Morris, John T. Murphy, Foster Myers, F. N. Nagel, W. C. Neill, Leonard Nippe, C. B. Ordway, Josephine Orr, Geo. B. Parison, Howard J. Parkhurst, C. E. Price, M. D. Rabenoyich, Thos. L. Ramsey, Glenn H. Reams, Anthony J. Rejent, K. Renshaw, R. D. Robinson, R. S. Sandhu, S. R. Salzman, A. H. Schade, M. Schaner, Byron G. Shaffer, Herbert E. Smead, Lewis F. Smead, James H. Smith, N. P. Stauffer, John L. Stifel, George P. Tait, Reynold A. Tank, Ernest B. Taylor, Aaron D. Vogelsang, C. W. Waggoner, M. A. Wagner, Henry L. Wenner, Philip D. Werum, Dale Wilson, Granville M. Wright, Joseph W. Young, Theodore Zbinden.

Youngstown: (22) K. W. Allison, Edgar C. Baker, John U. Buchanan, W. H. Bunn, Colin R. Clark, E. W. Coe, W. H. Evans, E. C. Goldcamp, Marvin B. Goldstein, J. P. Harvey, J. A. Heeley, J. E. L. Keyes, G. B. Kramer, John S. Lewis, Jr., H. E. McClenahan, Sidney McCurdy, F. W. McNamara, D. A. Nesbit, Claude B. Norris, F. F. Piercy, R. B. Poling, O. J. Walker.

Miscellaneous: (157) F. M. Elliott, Ada; Geo. L. King, Jr., Alliance; Perry F. King, Alliance; C. F. Murbach, Edwin A. Murbach, Archbold; J. P. Harbert, Bellefontaine; Chas. J. Wehr, Bellevue; H. D. Williamson, Bethany; C. F. Jackson, Bradner; David Danenburg, Bridgeport; Daniel G. Arnold, Bucyrus; A. Earl Snyder, Bryan; Robert E. Riley, Celina; Charles D. Slagle, Centerville; Walter C. Corey, Chardon; H. R. Brown, Chillicothe; E. C. Robbins, Chillicothe; Harry Bookwalter, Columbiana; B. C. Eades, Conneaut; Rodney D. Book, Corning; Herbert W. Kendell, Covington; Edward Charles Brandt, Crestline; E. D. Allen, Crooksville; G. Dean Tipton, Cuyahoga Falls; A. F. Latta, Cumberland.

D. J. Slosser, Defiance; Parker S. Bishop, Delta; P. C. Hartford, East Palestine; James I. Nisbet, Eaton; B. F. Thutt, Elida; Vernon W. Astler, Elmwood Place; W. B. Hubbell, Elyria; Alfonso F. Massaro, Elyria; H. O. Crosby, Findlay; Don C. Hughes, Findlay; Wm. Moss, Foster; A. J. Reycraft, Fostoria; W. R. Deemer, Fremont; Chas. L. Fox, Fremont; B. O. Kreilick, Fremont; Frank L. Moore, Fremont; Clarence Adams, Galion; E. D. Schuiteman, Genoa; H. E. Chalker, Girard; Daniel R. Barr, Grand Rapids; P. H. Leimbach, Greenford; G. E. Husted, Greenville; H. J. Baker, Hamilton; Mark Millikin, Hamilton; Neil Millikin, Hamilton; Claude L. Weston, Hamilton; Anne D. Marting, Ironton; W. F. Marting, Ironton.

Norman C. Schroeder, Kenton; Charles W. Burhans, A. G. Cranch, C. Lee Graber, Robert J. May, N. W. Shetter, John A. Toomey, Lakewood; Walter A. Noble, K. L. Parent, E. B. Pedlow, F. G. Stueber, Herbert A. Thomas, J. R. Thomas, James R. Tillotson, Lima; E. L. Crum, Lodi; C. Haarlammert, Loveland; J. A. Yoder, Mansfield; E. H. Knowlton, Mantua; J. F. Weber, Marietta; Herman S. Rhu, Marion; Carl W. Sawyer, Marion; T. H. Sutherland, Marion; Arthur J. Willey, Marion; Fillmore Young, Marion; J. M. Snider, Marysville; J. D. Holston, Massillon; Benjamin L. Hume, Mentor; C. C. Borden, Miamisburg; Chas. T. Hunt, Miamisburg; E. E. Kimmel, Miamisburg; H. E. Corl, Middlebranch; Chas. T. Atkinson, Middletown; Mabel E. Gardner, Middletown; Mildred White Gardiner, Middletown; E. McCall Morris, Middletown; John W. Laufersweiler, Minster; R. R. Alwood, Montpelier; J. A. Weitz, Montpelier; H. W. Wertz, Montpelier; Leonard Mounts, Morrow; Wm. W. Pennell, Mt. Vernon; F. C. Anderson, Mt. Vernon.

Louis A. Mitchell, Newark; L. A. Kleinhenz, New Bremen; G. Woodworth, Niles; E. A. Powell, North Baltimore; Joseph Bolin, Norwood; Raymond W. Bradshaw, Oberlin; R. D. A. Gunn, Oberlin; Benjamin S. Park, Painesville; G. W. Chabot, Peebles; Paul F. Orr, Perrysburg; Geo. McGuffin, Pettisville; George R. Upton, Piqua; G. A. Woodhouse, Pleasant Hill; C. J. Yeisley, Port Clinton; Wm. A. Quinn, Portsmouth; Frank Siedenburg, Portsmouth.

S. J. Bown, Richwood; L. A. Woolf, Ravenna; Wm. T. Fenker, Sandusky; Henry L. Sowash, Sandusky; George A. Stimson, Sandusky; L. F. Derfus, Salem; R. T. Holzbach, Salem; Ruth A. Robishaw, Shaker Heights; J. I. Thompson, Smithfield; James B. McMillen, Somerton; Stanley Hutchings, Springfield; J. A. Link, Springfield; J. W. Norman, St. Paris; Ralph R. Hendershott, Tiffin; Edward H. Porter, Tiffin; Paul J. Shank, Trotwood; E. R. Earle, Urbana; D. C. Houser, Urbana; J. Craig Bowman, Upper Sandusky; Frederick Kenan, Upper Sandusky.

S. A. Edwards, Van Wert; Emil J. Heinig, Vermilion; J. K. Durling, Wadsworth; Roy C. Hunter, Wapakoneta; Fillmore Compton, Warren; Henry I. Stiles, Warren; W. D. Maddox, Wauseon; Paul Yordy, West Carrollton; Geo. J. Roberts, Westminster; O. T. Sproull, West Union; Ray Vaughn, West Union; Chester G. Egger, Woodville; H. P. Gillespie, Woodsfield; Archie Crandell, Wooster; E. W. Douglass, Wooster; Alonzo C. Smith, Wooster; H. A. Wildman, Wooster; John G. Wishard, Wooster; G. T. Harding, Jr., Worthington; Geo. T. Harding, III, Worthington; Ben R. McClellan, Xenia; E. R. Brush, Zanesville; W. A. Melick, Zanesville; Harry C. Powelson, Zanesville; H. T. Sutton, Zanesville; G. B. Trout, Zanesville.

Credit Losses by Physicians

According to a survey recently completed by a credit bureau of one of Ohio's largest cities, the doctors and dentists of that city were unable to collect $1,750,000, or an average of 18.2 per cent of the total credit extended to patients, during the year 1929.

The loss, according to the survey, was confined to bad accounts and did not include charity work done by the two professions.

One of the most interesting facts disclosed by the study was that many persons who are good pay for other materials and services are bad risks for doctors and dentists.

Multiply these facts a good many times and the result will be the credit situation among physicians and dentists in the state generally.

It would be interesting to know if mercantile establishments chalk up an 18.2 per cent loss every year through bad accounts. The chances are they do not.

Such disclosures are but further examples of some of the hard rows that the practicing physician is called upon to hoe.

Possibly those who favor the present vogue for further extension of free medical service to those who are perfectly able to pay for services they receive can inform the physician how he can solve this problem.

Licenses Granted to 196 New Physicians in Ohio and other Transactions by State Medical Board at July Meeting

One hundred and ninety-six persons who took the June examinations in medicine and surgery given by the State Medical Board were granted licenses to practice in Ohio at the regular mid-summer meeting of the Board, held in Columbus, July 8.

Certificates to practice in Ohio also were granted to 14 osteopaths; 7 chiropractors; 8 mechano-therapists; 39 chiropodists; 17 masseurs, and 3 cosmetic-therapists.

Other business acted on by the Board included the reappointment of Miss Caroline McKee as a member of the nurses' examining committee and chief examiner, and the appointment of Dr. J. H. B. Scott, Columbus, as a member of the osteopathic examining committee.

The report of the activities of the Board for the period January 1, 1929, to December 31, 1929, as prepared by Dr. H. M. Platter, secretary of the Board, was discussed.

During the period covered by the report, certificates issued by the Board were divided as follows: Graduates in medicine and surgery on examinations, 280; graduates in medicine and surgery under reciprocity, 120; osteopaths on examination, 27; limited practitioners, under higher requirements, 91; chiropodists, on examination, under higher requirements, 20.

It was pointed out that during the 12 months covered by the report approximately 70 affidavits had been filed by the Board against alleged violators of the Medical Practice Act; that 41 convictions had been obtained, and that fines approximating $1775 had been assessed by the courts in cases tried.

Highest grade in the medical and surgery examinations given by the Board in June was made by James George Parker, Delaware, graduate of the St. Louis University Medical School, his average being 91.5.

Second place was taken by Nymphus Hicken, Cleveland, University of Pennsylvania, and John Carlton Drake, Cleveland, Western Reserve University, with grades of 90.3; third place by Edward John Keefe, Cleveland, Western Reserve University, and John Patrick Gavan, Cleveland, St. Louis University, with 90.2; fourth place by Irving Leroy Ress, Cleveland, Northwestern University, with 89.1, and fifth place to Joseph Hamilton McNinch, Columbus, Ohio State University, Kenneth Wolf Taylor, Pickerington, Ohio State University, and Sidney Elmer Wolpaw, Cleveland, Western Reserve University, with 89.

The complete list of those granted licenses upon pasage of the medical and surgical examinations follows:

University of Cincinnati—Arnold O. Abraham, Cincinnati; Frank Batsche, Cincinnati; James Sterrett Caldwell, Cincinnati; Williard Clarence Clark, Cincinnati; William P. Clark, Cincinnati; Sander Cohen, Cincinnati; Richard Williams Cragg, Cincinnati, Cincinnati; Clark McReight Dougherty, Woodsfield; Earnest Wolfert Ekermeyer, New Bremen; Harry Carl Ernsting, Hamilton; Carroll Judson Fairo, Cincinnati; Starr MacLeod Ford, Cincinnati; Harry LaCroix Fry, Cincinnati; Leo Glober, Cincinnati; Edgar Reese Hargett, Cincinnati; Sherman Reward Hawley, Toledo; Marie Alice Heintz, Cincinnati; Richard Carlton Heistand, Springfield; Thomas Field Humphrey, Cincinnati; Irvin Richard Itkoff, Cincinnati; Omer J. Jasper, Cincinnati; Harry Hartung Kleinberger, Lima; Rollin William Kuebbeler, Toledo; Gerson Lowenthal, Cincinnati; Jasper Reed McClure, Cincinnati; John D. Marioni, Cincinnati; Evalyn May Partymiller, Cincinnati; Samuel H. Portnoy, Cincinnati; John Evan Price, Cincinnati; Gerrit W. Raidt, Norwood; William Morris Schmidt, Cincinnati; Louis W. Schneider, Cincinnati; Abe Leon Schwartz, Cincinnati; Thomas Palmer Sharkey, Dayton; James Edwin Sherman, Cincinnati; Loren Russell Siefferman, Cincinnati; Eldrin Wallace Smith, Dayton; Albert H. Staderman, Cincinnati; William Frank Sohngen, Cincinnati; Jean Moorhead Stevenson, Circleville; Kenneth Leslie Stout, Cincinnati; John Findlay Taggart, Cleveland; Jonathan Gay VanDermark, Cincinnati; John Larkin Walker, Hillsboro; Stuart Mills Watson, Columbus; Josef David Weintraub, Cincinnati; Ashton Lee Welsh, Cincinnati; Gloyd Gage Wetherhill, Oberlin; Foster Mayhew Williams, Cincinnati; Edgar J. Willke, Cincinnati; Isaac E. Wolfson, Cincinnati; Charles J. Young, Cincinnati; William M. Youngerman, Cincinnati, and Boris Zemsky, Cincinnati.

Western Reserve University—Lawrence Atlas, Cleveland; Duane Eugene Banks, Beaver Falls, Pa.; George Binkley, Canton; Richard Francis Binzley, New Brighton, Pa.; Morton Sidney Biskind, Cleveland; Paul Andrew Blackstone, New Concord; Nelson Albert Brandeberry, Athens; Ralph Martin Burke, Cleveland; William W. Corwin, Rushsylvania; Walter Alexander Cunningham, Cleveland; Harold Goldsmith Curtis, Cleveland; Donald Carlton Darrah, Marietta; Joseph Michael DeNardi, Cleveland; John Carlton Drake, Cleveland; Theodore Phillip Eberhard, Cleveland; Martin Josef Fiala, Cleveland; Carl C. Francis, Cleveland; Milton Irving Friedman, Cleveland; Elmer F. Gooel, Cleveland; Carl Walter Hahn, Cleveland; Charles Llewellyn Hannum, Cleveland; Harvey Russell Hathaway, Cleveland; Burt Held, Akron; Lloyd Walter Judd, Cleve-

land; Roger Andrew Hemphill, Cleveland; John Lloyd Jones, Cleveland; Adib Karam, Cleveland; Edward John Keefe, Cleveland; Paul Eugene Kellogg, Ashland; Louis Eugene Lieder, Cleveland; Robert Moffatt McQuoid, Cleveland; Marion Repasz Martin, Bowling Green; Maynard Waite Martin, Akron; Claude G. Mentzer, Cleveland; Harry Archer Miller, Cleveland; John Raymond Moorehead, West Lafayette; Martha Margaret O'Neal, Zanesville; Leslie Herbert Osmond, Cleveland; Horatio Thomas Pease, Cleveland; William John Retzer, Cleveland; Henry Sisek, Youngstown; James Nelson Strausbaugh, Cleveland; Howard Prescott Taylor, Akron; George Arthur Tischler, Cleveland; John Miller Wilcox, Cleveland; Sidney Elmer Wolpaw, Cleveland; Thelma Marie Wygant, Akron; Melvin Francis Yeip, Cleveland, and Carl Edward Zeithaml, Chagrin Falls.

Ohio State University—Myron Donald Bartholomew, Marion; Emerson Millen Blake, Columbus; Margaret Louise Brooks, McConnelsville; Ray Brown, Columbus; Floyd William Craig, Coshocton; Josephine Kobb Dirion, Cleveland; Paul Strimple Fancher, Cleveland; John Joseph Folin, Cleveland; George William Fetzer, Cleveland; Milton Leonard Goodman, Columbus; David Samuel Greenberg, Steubenville; Samuel Lester Greenberg, Steubenville; Paul Croskey Grove, Cadiz; Kenneth Gilbert Hawver, Lima; Joseph Newton Hebble, Springfield; Clarence William Hullinger, Springfield; George Boltis Imhoff, Wooster; Bernard Edmund Ingmire, Columbus; Lawrence Neff Irvin, Elida; Julius A. Katzive, Steubenville; Alexander Henry Kimmel, Pittsburgh, Pa.; Ruth Alice Koons, Columbus; Cornelius Charles Landen, Columbus; Timothy Lehman, Columbus; Hyman Levy, Cleveland; John Marsico, Elyria; Howard Dillon Maxwell, Alliance; Donald Samuel McDill, Elizaville, Ind.; Wilbur Eilers McKee, Columbus; Joseph Hamilton McNinch, Columbus; Lawrence Brooks Mehl, Massillon; Roy Marion Meredith, Marietta; Nicholas Michael, Columbus; Delbert A. Minder, Columbus; James Kenneth Nealon, Pittsburgh, Pa.; Leonard Jackson Newell, Dayton; Ralph Clifton Paisley, Columbus; Beatrice Lucille Postle, Columbus; Charles Richard Price, Dayton; Robert Earl Pumphrey, Dayton; Thomas Edwin Rardin, Columbus; George Ira Sheetz, Coshocton; Roy Ellis Shell, Columbus; Chester Coleman Shinbach, Toledo; Kenneth Franklin Smith, Bryan; Frances Marion Stephens, Cincinnati; Earnest Marvin Tapp, West Mansfield; Kenneth Wolf Taylor, Pickerington; Cleland Barker Thomas, Cleveland; Graydon Dale Underwood, Crooksville; Harold Charles Weisenbarger, Greenville; Franklin Priest Wherry, Chester, West Va.; Daniel Jacob Whitacre, Columbus; Vernon Burton Wood, Aid Tp., Lawrence Co., William Griffith Workman, Beallsville, and John Alfred Yochem, Sandusky.

Other Medical Schools—Milton Peyton Smith, Toledo, Baylor University; Henry Francis Rohs, Cincinnati, Creighton University; Theron Harvard Morgan, Athens, George Washington University; David Edman Quinn, Dennison, George Washington University; Alexander Francis Wahling, Dayton, Hahnemann Medical College; Saul Hertz, Cleveland, Harvard University; Charles Henry Kelley, Youngstown, Harvard University; William Evans Hudson, Dayton, Jefferson Medical College; Charles William Lighthizer, Steubenville, Jefferson Medical College; Lewis Benjamin Saslaw, Cleveland, Jefferson Medical College; Wynne M. Silbernagel, Columbus, Jefferson Medical College; Charles Harry Warnock, Youngstown, Jefferson Medical College; Theodore H. Wills, Maria Stein, Loyola University; Ikbal Krishua, Toledo, University of Illinois; Iriving Leroy Ress, Cleveland, Northwestern University; Robert Alvord Reading, Cleveland, Northwestern University; Bernard Botsch, Alliance, University of Maryland; Finley Frederick Neuman, Cleveland Heights, University of Maryland; Joseph Lipshutz, Cleveland, University of Oregon; Nymphus Hicken, Cleveland, University of Pennsylvania; Millard Charles Beyer, Akron, St. Louis University; Edwin Eugene Domall, Toledo, St. Louis University; John Patrick Gavan, Cleveland, St. Louis University; Dominic Leo LoPorto, Cleveland, St. Louis University; Harry Thomas McFarland, Marion, St. Louis University; James William Ockington, Lakewood, St. Louis University; James George Parker, Delaware, St. Louis University; Joseph Louis Pater, Hamilton, St. Louis University; Peter Ernest Russo, Cleveland, St. Louis University; Russell Phea Sterling, Cleveland, University of Wisconsin; Isadore Richard Birnbaum, Akron, University of Wisconsin; William Lorne Deeton, Cleveland, University of Toronto; Henry M. I. Sparks, Cleveland, University of Toronto; Leonel Alfred Macklin, Cleveland, University of Toronto; Walter Hauck Weber, Columbus, University of Toronto; Diomede Guertin, Cincinnati, University of Montreal, and Jean Pilcher, Cleveland Heights, University of Edinburgh.

Licensed Through Reciprocity — Garland N. Adamson, Youngstown, Meharry Medical College; Lorne H. Aikins, Cleveland, University of Toronto; John B. Anderson, Cleveland, University of Buffalo; George W. Bartels, Cleveland, Iowa State University; James B. Birch, Youngstown, University of Pennsylvania; John J. Blue, Fostoria, Detroit College of Medicine and Surgery; Aubrey E. Boyles, Akron, Northwestern University; Benjamin Chavinson, Cleveland, University of Louisville; Earl N. Clark, Middletown, University of Louisville; Arthur M. Culler, Dayton, University of Michigan; Edward I. Davies, Cincinnati, Temple University; Theodore I. Gandy, Toledo, Howard University; Roland E.

Gardner, Jackson, University of Louisville; George A. Gressle, Newark, University of Louisville; Harry G. Hockett, Dayton, Hahnemann Medical College; Leslie G. Hodder, Massillon, University of Western Ontario; James E. Joice, Jr., Cleveland, Meharry Medical College; Israel Katz, Cleveland, University of Louisville; Bernard T. Koon, Zanesville, St. Louis University; Earl F. Limbach, Willard, University of Maryland; Donald H. Linard, Cleveland, Jefferson Medical College; John F. Lyons, Cincinnati, Indiana University; Joe S. McMath, Wyoming, Emory University; Bryce A. Newbaker, Alliance, Hahnemann Medical College; Eugene B. Pierce, Canton, University of Michigan; Paul A. Reeder, Barnesville, University of Maryland; Jacob M. Rieger, Cleveland, University of Kansas; James E. Schaal, Toledo, St. Louis University; Jefferson D. Swango, Waterloo, Hahnemann Medical College; John H. Underwood, Canton, University of Maryland; Dale Van Duzen, Cleveland, University of Michigan; Winter C. Wallace, Hopedale, Medical College, State of South Carolina; Hugh Wellmeier, Dayton, University of Michigan; William P. Yancy, Chillicothe, Meharry Medical College; William P. Young, Akron, Meharry Medical College; Jack M. York, Painesville, University of Buffalo; William J. Gardner, Cleveland, University of Pennsylvania; Karl H. Langenstrass, Massillon, University of Jena, (Germany); Jacob Shapiro, Cleveland, University of Michigan.

New Administrative Set-Up In Effect Under Recent Legislation Governing Prohibition and Medicinal Alcohol

Reorganization of the administrative machinery for enforcement of the national prohibition act and issuance of permits for industrial alcohol and medicinal liquors and alcohol in Ohio has been completed in compliance with the provisions of the Williamson Act, passed at the recent session of Congress, which became effective July 1.

As pointed out previously in *The Journal*, the Williamson Act provides for a Bureau of Prohibition in the Department of Justice to take over the enforcement work in administration of the national prohibition act. It provides also for retention of the present Bureau of Prohibition in the Treasury Department which is now known as the Bureau of Industrial Alcohol and which has supervision of all work concerning the issuance, suspension and revocation of permits for the use, dispensing and prescribing of industrial alcohol and medicinal liquors and alcohol.

Under the new set-up, all the present prohibition districts have been abolished and 12 new ones created with boundaries corresponding in most cases with the districts of the United States Circuit Courts of Appeal.

Ohio is included in the district embracing the states in the Sixth Circuit. Cincinnati, the seat of the U. S. Circuit Court of Appeals for the Sixth Circuit is the new headquarters for the newly-created district. Other states in the district are Michigan, Kentucky and Tennessee.

Headquarters in Columbus of the old enforcement district of Ohio and Indiana are being transferred to Cincinnati.

William N. Woodruff, administrator of the former Ohio-Indiana enforcement district for the past three years with headquarters in Columbus, is the administrator of the new enlarged district. Mr. Woodruff has assumed charge of the new headquarters at Cincinnati and will transfer about 60 members of his old staff from Columbus to Cincinnati.

Charles L. Hurlburt, former deputy administrator under Woodruff, has been appointed a deputy administrator under the reorganization and is in charge of the branch enforcement office in Columbus. Branch offices also will be retained at Cleveland and Toledo.

R. E. Joyce, formerly deputy administrator at Pittsburgh, is the new supervisor of permits for the Ohio-Michigan-Kentucky-Tennessee district. His headquarters will be in Cincinnati also.

After August 9, all applications for permits and all correspondence from permittees, including physicians, druggists, hospitals, etc., should be sent to the Bureau of Industrial Alcohol, Federal Prohibition Offices, Cincinnati. Until that date the permissive work under the national prohibition act will be handled at the Columbus office.

Shortly after August 1, Mr. Joyce states he expects to circularize all permittees, notifying them officially of the reorganization and giving them the permanent Cincinnati address of the Bureau of Industrial Alcohol which will handle all the details formerly handled by the abandoned Columbus headquarters.

All the existing regulations governing the issuance of permits for the use, prescribing and dispensing of medicinal alcohol and liquors have been continued in force by an order issued jointly by the Secretary of the Treasury and the Attorney General.

The present regulations, as explained in the joint order, will be continued in force until September 1, 1930, after which date they shall be void and of no further effect. At that time a substitute set of regulations governing the permissive phases of the prohibition law will be issued by the two department chiefs.

The Secretary of the Treasury and the Attorney General have for some time been checking the present regulations for the purpose of noting what revision—if any—will be necessary under the reorganization.

While some changes and revisions may be made in the existing regulations regarding medicinal alcohol and liquor when the new set of regulations is promulgated, it is believed by those in close touch with officials drafting the new regulations that the changes made in sections affecting physicians, hospitals, dentists, etc., will be of a minor nature.

A recent authorized statement issued by Dr. James M. Doran, former National Prohibition Commissioner who is the new director of the Bureau of Industrial Alcohol in the Treasury Department, states that he is of the opinion that any changes in the present rules and regulations governing industrial alcohol and medicinal alcohol and liquors would likely be of a minor character "because much time has been spent in drawing up regulations that would not handicap legitimate industry and would serve, at the same time, to assure enforcement of the laws".

The only changes that have been made so far in the regulations under the reorganization act are those necessitated in conferring jurisdiction upon officials having direct charge of enforcement in the two bureaus, one in the Treasury Department and one in the Department of Justice.

Under the federal readjustment, A. W. W. Woodcock, Salisbury, Md., former U. S. attorney for the District of Maryland, becomes director of the Bureau of Prohibition in the Department of Justice, and Dr. Doran, as stated previously, becomes director of the Bureau of Industrial Alcohol in the Treasury Department.

Ohio Physicians Among the Legislative Candidates At the August Primaries

Eight Ohio physicians are among the candidates to be voted on at the August 12 primaries for nomination to seats in the next sessions of the Ohio General Assembly and the United States Congress.

Dr. E. LeFever, of Glouster, Athens County, and Dr. George G. Hunter, of Ironton, Lawrence County, are candidates for the Republican nomination for State Senator in their respective districts.

Dr. LeFever, who has served a longer term in the State Legislature than any present member of the General Assembly, is seeking renomination in the 9th-14th District, consisting of Fairfield Hocking, Athens, Morgan and Washington Counties. Dr. LeFever has occupied a seat in the State Senate for five consecutive terms, preceded by two terms in the House of Representatives. During that time, Dr. LeFever has rendered faithful and valuable service to his constituents and the state at large, and during his terms in the Senate has served as chairman of that body's Committee on Health.

Dr. Hunter, who served as a member of the present House in the Eighty-Eighth General Assembly, is seeking the Republican nomination for a seat in the next State Senate from the 7th-8th District, composed of Adams, Pike, Scioto, Vinton, Jackson, Lawrence, Meigs and Gallia Counties. Dr. Hunter was a valuable member of the Health Committee of the House in the Eighty-Eighth General Assembly.

Dr. Harry S. Davidson, Akron, is a candidate for the Republican nomination for a seat in the House of Representatives in the next Legislature from Summit County. Dr. Davidson served three consecutive terms in the House prior to the last session of the General Assembly when he was not a candidate. He rendered splendid service as chairman of the House Health Committee during his three terms in the Legislature.

Dr. A. H. Syler, Sugar Creek, is a candidate on the Republican ticket for nomination to the House from Tuscarawas County.

Dr. W. L. Evans, Hanover, has filed as a candidate for the Democratic nomination for a seat in the House of Representatives in the next Legislature from Licking County.

Dr. M. L. Downing, Rockford, president of the Mercer County Medical Society, and prominent in public and civic affairs in his home county, is a candidate for the Democratic nomination for membership in the House of Representatives.

Two Ohio physicians are candidates for seats in the lower house of the U. S. Congress.

Dr. Gainor Jennings, West Milton, Miami County, is seeking the Democratic nomination from the Fourth Ohio District, composed of Allen, Auglaize, Mercer, Shelby, Darke and Miami Counties.

Dr. H. L. Crary, formerly of Middleport, Meigs County, now of Gallipolis, is a candidate for the Democratic nomination to Congress from the 10th Ohio District, composed of Athens, Meigs, Vinton, Jackson, Gallia and Lawrence Counties.

Lack of complete information makes it impossible at this time to assemble the names of physicians who are candidates for local offices, such as county coroner, mayors and councilmen of cities and villages, etc.

New Regulations in Effect on X-Ray Films Submitted by Physicians in Workmen's Compensation Cases

A number of important changes in the rules and regulations governing the filing of *X*-ray examination reports by physicians in Workmen's Compensation cases have been promulgated by the medical department of the State Industrial Commission at the order of the Commission.

More than a year ago, shortly after the Cleveland Clinic disaster, the Commission recognized the need for the adoption of safer methods of storing the *X*-ray films that have accumulated in the Commission's files. Considerable study has been devoted to the problem and efforts made to work out some practical plan for eliminating the fire hazard that now exists in the offices occupied by the Commission and its various departments.

The first step in eliminating this hazard, not only to the lives of the hundreds of employes of the Commission, but to the valuable and irreplaceable records of cases that have been filed at the Commission, is the present order establishing new procedure in the submission by physicians of *X*-ray reports.

In the future it will be necessary for all physicians who submit *X*-ray reports to conform to the following new rules:

1. Either films or prints of the films are acceptable.

2. If films are filed, the interpretations must be written on a separate sheet and the following data must be written in white ink on the films themselves:

a. The claim number.
b. Name of claimant.
c. The date of the X-ray examination.
d. Name of roentgenologist.

3. When films are filed with Form C-3 (medical only cases) before a number has been assigned, all of the above data except the claim number must be written on the film in white ink. The Commission will add the claim number after one has been assigned.

4. No bills for X-ray examination will be paid without interpretation of either films or print.

5. Hereafter films will be returned to the sender unless these rules are followed.

Dr. H. H. Dorr, chief medical examiner for the Commission, in explaining the new rules, states that the Commission realizes that they will increase to some extent the work of physicians engaged in X-ray work, but that the Commission also is of the opinion that the physicians of the state will be willing to assume this additional burden since it will be of great assistance to the Commission in "cleaning-up" the dangerous hazards that exist in its own headquarters.

It is pointed out that under the new system, paper records and *X*-ray films will be filed separately—the documents in one battery of files and the films in another of fire-proof construction. Under the system in use up to the present time, documents and files have been stored in the same files.

Commenting further on the new system, Dr. Dorr said:

"Few persons probably realize the additional burden which this revision of the *X*-ray rules imposes on the Commission itself. It will necessitate the installation of a new set of files especially for films.

"The Commission is of the opinion that the handling of films under the new plan can be speeded-up and done with a minimum of error by asking the physicians to cooperate by marking the required data on the films before they are mailed to the Commission. This will eliminate the necessity of marking each film as it is received by the Commission. Many physicians are at present doing this of their own volition and it is our hope that all will conform to the request without delay.

"The Commission expects to cooperate in every way with physicians on this question. Until the system is fully understood and working smoothly, all films not properly marked will be returned to the sender with a letter of explanation and a request that they be marked in accordance with the new rules.

"The new rules do not in any way conflict or supercede existing rules relative to data, information and interpretations to be supplied by physicians. All forms and applications should be filed as usual. The only additional work asked of the physician is that he give certain data on the margin of the films themselves."

Dr. Dorr pointed out that a number of films are received each month by the Commission which bear no marks of identification—not even the name of the sender.

"There are probably some physicians in the state who are wondering why they don't receive their money for *X*-ray work," Dr. Dorr said. "They are undoubtedly those who have sent in films without any marks of identification or a return address. The Commission has no way of telling to what cases these films belong or who made them. They are a dead loss to the Commission and the physician as well. Unless the Commission has the name of the sender it is powerless to authorize the payment of fees for the work done."

Dr. Dorr stated that it has been suggested to the Commission by persons interested in the problem of storing and handling films in workmen's compensation cases that physicians be permitted to retain all films, sending to the Commission in-

terpretations only unless specifically ordered to submit the films themselves in disputed cases. He said the Commission had such a plan under advisement but that he was unable to say whether such a procedure would meet with the approval of the Commission or be practical in administering the Workmen's Compensation Law.

Just what steps the Commission will take in separating *X*-ray films from its files of cases that have been settled or involve long periods of permanent or partial disability is still in doubt.

It is understood that at the present time between two million and a half and three million cases are on file, either at the Industrial Commission offices or at the State House. Many thousands of these files contain *X*-ray films. The enormity of the task of separating, marking and filing separately these films is apparent, according to officials at the Commission.

It is said that some provision for keeping these files intact and as safely as possible for the time being will be worked out and followed until the completion of the new State Office Building in which adequate fire-proof storage space for the Commission's records will be provided.

Western Reserve Medical School Staff Announcements

The following new appointments and promotions in the School of Medicine, Western Reserve University, have been announced:

New appointments—Dr. Roger G. Perkins, professor emeritus of hygiene and preventive medicine; Major Ross B. Bretz, M.D., professor of military science and tactics; Dr. James A. Doull, professor of hygiene and public health.

Promotions—Dr. Abram B. Bruner, associate clinical professor of ophthalmology; Dr. John A. Gammel, assistant clinical professor of dermatology; Dr. John A. Rauschkolb, assistant clinical professor of dermatology; Dr. Walter B. Rogers, assistant clinical professor of surgery; Dr. Marion Douglas, assistant professor of gynecology; Dr. William M. Champion, senior clinical instructor in pediatrics; Dr. Norman C. Wetzel, assistant professor of gynecology; Dr. James E. Hallisy, senior clinical instructor in anatomy; Dr. Joyce I. Hartman, senior clinical instructor in pediatrics; Dr. Hagope G. Miskjian, senior clinical instructor in dermatology; Dr. Oliver A. Weber, senior clinical instructor in surgery; Dr. Samuel O. Freedlander, senior instructor in surgery; Dr. M. Paul Motto, senior instructor in ophthalmology; Dr. James W. Mull, senior instructor in biochemistry in charge of biochemical research in obstetrics; Dr. Herbert S. Reichle, senior instructor in pediatrics; Dr. Joseph Fetterman, clinical instructor in nervous diseases; Dr. Samuel G. Lindsay, clinical instructor in nervous diseases; Dr. O. B. Pomeroy, clinical instructor in obstetrics; Dr. Harry B. Trattner, clinical instructor in genito-urinary surgery; Dr. Ramon F. Hanzal, instructor in pathological chemistry; Dr. Homer J. Hartzell, instructor in ophthalmology; Dr. Robert A. Moore, instructor in pathology; Dr. George R. Russell, instructor in pediatrics, and Dr. David Steel, instructor in roentgenology.

Two and One-Half Million Blind in the World, It Is Estimated

There are close to 2,500,000 blind persons in the world, and active efforts toward prevention of blindness are now under way in 28 counties, it is disclosed in the report of a two-year study by the International League of Red Cross Societies, made public by Lewis H. Carris, managing director of the National Society for the Prevention of Blindness.

Among the recommendations of the report are: that the trachoma research of the late Dr. Hideyo Noguchi of the Rockefeller Foundation be carried further; that a worldwide agreement be reached on a standard definition of "blindness"; that more attention be given to special educational facilities and vocational guidance for children with defective vision; and that greater efforts be made to cut down the eye hazards of industry which in America and some other countries now constitute one of the most serious causes of blindness.

The total reported blind population of all the countries from which reliable information could be obtained is 1,193,734. The total population represented being 876,004,976, the ratio of blind in the aggregate is 136.3 per 100,000 population, the report estimates.

The countries specified have about half the population of the world, and on that basis it might be estimated that the total of blind persons in the world is about 2,390,000, it is pointed out.

So far as the amount of blindness in the United States is concerned, the report states, "varying estimates are found. The number is considerably higher than 52,617, as given in the 1920 census report." Concerning this figure, Mr. Carris said that it would be more accurate probably to accept the estimate of 100,000 as the blind population of the United States.

"With the development of inventions and the consequent rapid expansion in manufacture and transportation, a large increase of the blind population has been the result of the hazards of industrial life," it was pointed out. "In the United States approximately 15 per cent of the blind are so as the result of industrial accidents. It is a very evident fact that a still greater number have vision so impaired by injury as to be handicapped for life."

Public Health Problems and Statistics Discussed in Report of Joint Committee of A. M. A. and N. E. A.

Progress that has been made by medical science and education in their battle against disease is summed up in a revised report of the joint committee on health problems of the American Medical Association and the National Educational Association.

The report is the first revision of the joint committee's statistics since 1924.

The reduction in the death rate of diphtheria is hailed as one of the most striking victories recorded in the report of medical progress in the past fifty years. The factors chiefly responsible for the reduction of 95 per cent in the mortality rate of diphtheria since 1900, according to the report, are the discovery of diphtheria antitoxin and of toxin -antitoxin.

Despite the tremendous reduction in many diseases, however, the study shows that the country still pays a large toll to sickness in money.

It is pointed out that more than $927,000,000 a year is contributed by taxpayers to care for sufferers from tuberculosis and heart disease and to assist those who are physically handicapped. Of this amount, the report states, $800,000,000 goes to the tubercular; $90,000,000 to cardiac victims and $37,000,000 to the physically handicapped. Deaths from tuberculosis, it is estimated, cost the people of the United States more than $1,500,000,000 a year.

Since 1900, the report declares, the filtration and chemical treatment of water, the pasteurization of milk, and the control of carriers have cut the death rate for typhoid and para-typhoid from 34 persons per 100,000 to 4.9 per 100,000 in 1928.

The reduction was even more striking in military life, where typhoid formerly took a heavy toll. This the report illustrates by United States Army statistics. During the first two years of the Civil War typhoid caused 1,961 deaths among every 100,000 soldiers, whereas during the first two years of the World War only five soldiers in every 100,000 died of this type of disease.

The committee's report indicates that more than 31,000 soldiers' lives were saved because medical men were more successful in applying their knowledge for the prevention of typhoid during the first two years of our entry in the World War than in the same period of the Civil War.

The almost complete elimination of Cholera, typhus and yellow fever, all of which took thousands of lives throughout this country during the last century are also reported.

A great reduction in the general death rate of the nation is one of the outstanding features of the report. Prior to 1900 the general death rate of the nation ranged between 20 and 30 per 1,000 of population. In 1928 the rate was 12 per thousand. As a result of these and other factors, the report indicates that twenty years have been added to the average expectancy of life in this country in the last twenty-five years.

The fight waged against tuberculosis has been most successful, according to the figures in the report. The death rate from consumption has decreased from 194 per 100,000 in 1900 to 79 per 100,000 in 1928.

The decrease in tuberculosis mortality has been more pronounced among certain ages than other. Thus the least improvement has occurred among young people, chiefly girls and women between the ages of 15 and 24, according to the report.

Owing to the increased expectancy of life in this country and the decrease in the prevalence of these diseases, the monetary value of newly born children's lives have greatly increased, so that a boy born in 1924 was potentially worth $1,780 more than such a child born in 1901, the report estimates. At that time he would have been worth $7,553, using his life expectancy and earning capacity as a basis for consideration. Thus the report estimates that the results of health education have saved this country more than $3,500,000,000 during the last quarter of a century.

Exclusive of ordinary illness in this country, it is estimated that there are 75,000 blind, 45,000 deaf and dumb, and well over 300,000 mental defectives in the United States at present. More than 700,000 persons in the United States are also crippled to an extent that interferes with their earning a living.

The expense of maintaining these individuals amounts to more than $100,000,000, the report says.

Revisions in the new report include a more detailed discussion of immunization against preventable diseases, mouth hygiene, accident prevention, mental hygiene and application of psychology to health education.

Doctors who are employed and reside at state institutions are prohibited from engaging in a general practice under a ruling handed down by the State Board of Control of New Jersey. The only outside work permitted under the ruling is consultation work by specialists and rendering of expert testimony in court cases.

The United States Civil Service Commission has announced an open competitive examination for the position of biochemist (pharmacologist) in the National Institute of Health, Washington, D. C. Applications for the position must be filed not later than August 13.

Internships Announced in Several Ohio Hospitals

Appointments of new interns for the coming year have been announced by a number of hospitals throughout the state.

Among those making new appointments and the appointees are:

Charity Hospital, Cleveland—Lawrence Atlas, Cleveland Heights; John L. Jones, Cleveland; Melvin F. Yeip, Cleveland; William W. Corwin, Rushylvania, and Edward J. Keefe, Mansfield.

Lakeside Hospital, Cleveland—Donald C. Darrah, Cleveland; George A. Tischler, Cleveland; John M. Wilcox, Cleveland; Duane E. Banks, Beaver Falls, Pa.; Walter A. Cunningham, Steubenville; Joseph M. DeNardi, Dillonville; Theodore P. Eberhard, Akron; Carl C. Francis, Cadiz; Burt Held, Akron; Leabelle Alice Isaac, Lorain; Robert M. McQuoid, Schenectady, N. Y.; Leslie H. Osmond, Chardon; Horatio T. Pease, Minerva; Howard P. Taylor, Akron.

St. Luke's Hospital, Cleveland—George Binkley, Canton; Paul E. Kellogg, Ashland.

City Hosiptal, Cleveland—Paul A. Blackstone, Cleveland; Charles L. Hannum, Cleveland; Harvey R. Hathaway, Auburn, Ind.; Roger A. Hemphill, Salem, N. Y.; Adib Karam, Canton; Marion R. Martin, Tiffin; Mabel L. Pearce, Steubenville; Wilmot F. Schneider, Troy, N. Y.; James N. Strausbaugh, Sharon, Pa.

Mt. Sinai, Cleveland — Harold G. Curtis, Cleveland; Elmer F. Gooel, Cleveland; Louis E. Lieder, Cleveland; Sidney E. Wolpaw, Cleveland; John C. Drake, Howard.

Babies and Children's Hospital, Cleveland—Milton I. Friedman, Cleveland.

Lutheran Hospital, Cleveland—Carl W. Hahn, Cleveland; Lloyd W. Judd, Middlefield.

St. John's Hospital, Cleveland—William J. Retzer, Cleveland.

St. Alexis Hospital, Cleveland—Carl E. Zeithaml, Chagrin Falls.

City Hospital, Akron—Maynard W. Martin, Akron.

Youngstown City Hospital—Henry Sisek, Youngstown.

Good Samaritan Hosiptal, Cincinnati—Omer J. Jasper, Cincinnati; Willard C. Clark, Cincinnati; Edgar J. Wilke, Cincinnati; Carroll J. Fairo, Cincinnati; Harry C. Ernsting, Cincinnati; William F. Sohngen, Cincinnati; Starr Ford, Cincinnati; James E. Vollmer, Chicago; Joseph L. Pater, Hamilton; Walter W. O'Nan, St. Louis; Ronald J. McNamara, Parkersburg, W. Va.; James G. Parker, Delaware.

St. Mary's Hospital, Cincinnati—John Marioni, Cincinnati; David C. Richardson, Evanston, Ill.; John F. Flannery, Cincinnati.

City Hospital, Springfield—H. C. Weisenbarger, Granville; Wilbur K. Bond, Greensfork, Ind.; W. D. Beasley, Colerain, N. C.; and Clarence W. Hulinger, Springfield.

Welfare Advisory Committee Makes Recommendations

The Welfare Advisory Commission appointed by Governor Cooper following the Easter Monday fire at the Ohio State Penitentiary has submitted a partial report to State Welfare Director H. H. Griswold, based on its findings during recent visits to all the state penal, correctional and charitable institutions.

Among the more important recommendations made by the commission to date are:

Establishment of a bureau of classification in charge of psychiatrists, psychologists and sociologists to classify all inmates of the penal institutions and provide for the segregation and transfer from the penitentiary of the better types of prisoners.

Erection of a new wing at the London prison farm.

Erection of a new dormitory at the Mansfield Reformatory.

Erection of a new cottage at the Lancaster Industrial School.

Increase of the force of parole officers to the end that no officer shall handle more than 150 parole cases.

Elimination of fire hazards at all state institutions.

Expansion of the Grafton Farm as an institution to relieve congestion at the Mansfield Reformatory.

Building of a trained personnel for all penal and correctional institutions.

Some of the recommendations made so far by the commission are already being put into concrete form.

Plans are now being drawn for the new wing at the London Prison Farm.

Setting up of machinery to classify all prisoners at the penal institutions looking toward their transfer to other institutions has been started.

Dr. C. H. Creed, first assistant physician at the Columbus State Hospital, has been appointed head of the new bureau of classification. A staff to assist him in the work of examining all prisoners and make recommendations for the transfer of those believed to be in need of treatment in correctional institutions is to be selected by Welfare Director Griswold in the near future. Dr. Creed's appointment is for one year.

Among proposals to be considered at a later date by Governor Cooper's commission are:

Adoption of the system of classification of prisoners and specialization of institutions as a permanent policy of the state.

Continuation of the London Prison Farm as an open type of institution for the better class of prisoners with a limited population.

Establishment of a receiving department for adult male prisoners at the Penitentiary where they may be classified.

Granting the courts the option of committing offenders to the Department of Welfare instead of to a specific institution.

These topics will be studied along with others and reported on in the final report of the commission to the governor.

Significant Comments on Governmental Costs and Policies in Veteran Relief Legislation

Immediate and ultimate results of the recent action of Congress in broadening extensively the present laws relative to compensation and hospitalization of World War veterans have been the subject of considerable controversy among students of political science, economists and writers in the daily press and other periodicals.

Although disagreeing on many phases of the question, most writers are of the united opinion that the problem of veterans' relief is still in its infancy and that demands on Congress for further liberalization of the existing statutes relative to veterans of the World War will multiply with the passing years.

As William Hard, special writer on Washington political affairs, points out:

"The new law (the compromise compensation law passed in the closing hours of the recent session of Congress) is regarded by the best opinion here as being one more stage in a development toward newer and broader laws in the future. * * * The new law, since it vastly widens the opportunity for applications, also necessarily will widen vastly the opportunity for just or unjust bureaucratic rejections of them. In every congressional district in the United States the number of veterans thinking themselves to have been treated badly by the veterans' bureau will be multiplied largely. The political pressure thereupon for the broadening of the new law will become irresistible. First the scale of payments for disabilities will be increased and then finally allowances will be granted simply for world war service, irrespective of disabilities. That is the prospect which the events of the last two weeks has established firmly in the minds of the most solid students of veterans' affairs."

Following an analysis of the anticipated costs of the enlarged veterans' program. Mr. Hard writes:

"The country should know, not as a surmise or as a comment, but as a fact, that the subsequent and present enlargement of that cost and the adoption of schemes which will lead straight on to the tremendous enlargements of it in the rapidly approaching future have been due essentially not to the clamors of veterans but to the exigencies of politics.

"The instant historical truth is that each political party took the American Legion scheme as a mere political springboard from which it could do fancy dives into the treasury amid political applause."

Dodging the expression of any personal opinion as to some of the chief objections that have been raised regarding the present veterans' relief policy adopted by Congress, Representative Johnson, Aberdeen, South Dakota, author of the disputed compensation act, in a recent public statement discussed some of the financial aspects of the new legislation.

"My belief", he said, "is that there will be somewhere between $40,000,000 and $50,000,000 of costs under that law the first year, reaching to about the same maximum as General Hines (Frank T. Hines, director of the Veterans' Bureau) figured, that is $80,000,000, beginning about five years hence.

"My estimate is that we will be spending out of the Federal Treasury close to $560,000,000 during this fiscal year on account of all World War veterans' expense—including compensation, hospitalization, construction and maintenance and so on—and that the total costs to the nation within five or six years will be running at about $1,000,000,000 annually. We have already expended for World War veterans approximately $8,000,000,000, which includes all items, compensation, insurance, vocational training, hospitals, and everything else that relates to World War veterans, up to this fiscal year we have just entered upon. In figuring costs ahead, bear in mind the Veterans' Bureau estimates on insurance calculation that the last World War veteran will die about 1997 and that their dependents will still be living."

Introduction of legislation now pending in Congress which would provide federal benefits for women who served with the American Expeditionary Forces during the World War is judged by some writers as an indication that efforts are to be made by civilian groups who served abroad during war to obtain military status so that they would be eligible for the benefits of the World War Veterans' Act.

Commenting on the proposal at the request of a member of the Military Affairs Committee of the House of Representatives, Secretary of War Patrick J. Hurley said that the effect of the bill would be to extend to American women taken from the United States by the government to serve in base hospitals overseas and to workers of the American Red Cross who lived in military hospitals the provisions of existing laws conferring benefits on World War veterans by holding that such personnel shall be considered as having served as members of the military forces of the United States.

"Other than those mentioned in the pending bill", Mr. Hurley said, "numerous citizens of the United States, both men and women, performed meritorious service as civilian employes in the American Expeditionary Forces; in the Ordinance Department; as members of the Signal Corps Female Overseas Telephone Unit; as stenographers, typists and clerks, and as labora-

tory employes, technicians, dietitians and construction aides. Also there were a good many women employed overseas by the several affiliated welfare associations whose status was very much the same as that of civilian Red Cross workers though but relatively few of them were employed in hospitals.

"The proposed bill, therefore, if enacted into law would conceivably be used as a precedent by many, if not all, of the above personnel in requesting the enactment of similar legislation in their behalf."

Ohio Hospital Data Announced by State Bureau

During the year 1929, 350 hospitals were listed with the State Department of Health, Bureau of Hospitals, according to a recent annual report compiled by that bureau.

Of this number 310 were registered, and 201 licensed to do maternity work. Hospitals are classified according to service: 30, general; 165, general and maternity; 37, maternity; 15, tuberculosis; 23, mental and nervous; 16, aged and convalescent; 31, special, nine, children; 11, miscellaneous; together with the state institutions of which there are: eight, insane; one, epileptic; two, feeble-minded; one, tuberculosis; four, reformatories.

The average daily cost for each patient in the hospitals for the year 1928, exclusive of the state institutions, was $5.31; a total cost of $27,434,-444.22, which, if apportioned to every man, woman and child in the state, would be $4.10 per year. There were 5,166,562 days treatment given, which is equal to every person in the state receiving 20 hours hospital service. Five and one-half per cent of the entire population, or 355,978 persons, received hospital service. Hospitals of 500 beds or more had the lowest per capita day cost, the average daily cost being $4.28; those with from one to 25 beds, being the highest, with a cost of $6.44 per capita—proving that it costs more per bed to service a small hospital than one with a greater number of beds. The average per capita cost for maternity hospitals, including refuge homes which are largely charitable institutions, was only $1.80.

There were 24.260 beds in the hospitals of the state, exclusive of state institutions, in 1929. The average number of hospital days of each patient was 14½ days.

The state requires all hospitals to render an annual report of the service and expense entailed in carrying on the work of each hospital. These report blanks are furnished by the state, and carry such questions as will give a complete picture of the hospital when the information is properly given.

An addition to the annual report required of all Ohio hospitals in 1929 was that of accident and emergency service. This was the result of action taken by the Ohio group a year ago last June at Atlantic City during the annual convention of the American Hospital Association when the following resolution was offered and adopted by the Ohio group:

"That Ohio hospitals be requested to maintain their records so as to be able to determine for the period, July 1, 1929 to June 30, 1930, the following statistics pertaining to automobile accident cases treated:

1. Number of patients treated.
3. Number of admissions to hospital.
3. Total days of service rendered.
4. Total amount collected."

A statement given out by the Ohio group at that time declared that the purpose of the resolution was to permit the Ohio Hospital Association to make a study of this problem throughout the entire state so that the Association "may have a basis for preparing and backing legislation for relief of this problem, such legislation to be submitted to the next General Assembly which convenes in January, 1931".

Another addition to the report is that regarding personnel since the information on the actual number engaged in all lines of hospital service and work has been vague and indefinite.

A Malpractice Decision

In reversing the lower court in a malpractice suit filed against a registered nurse, an Appellate Court of the State of New York held that the meaning of the term "malpractice" in the statute was limited to physicians and surgeons and did not include actions brought against a registered nurse for claimed negligence in the treatment of a patient. The court held that the law should be interpreted as follows:

"That malpractice is to be considered in its primary meaning, and as generally understood by the ordinarily intelligent and reasonably informed person, and in this respect, according to such common usage and acceptance, it has continuously been intended to import an improper treatment or culpable neglect of a patient by a physician or surgeon. As an added significance it has been used to indicate a corrupt or culpably incompetent practitioner of either law or medicine, but in no instance is it found to have possible application to a nurse, nor is there anything in the test of this complaint which indicates that the gravemen of the action is other than the negligent conduct and reckless, careless and incompetent performance of common duties of a person engaged in an employment for such specified duties as distinguished from lack of or improper performance of work requiring purely professional skill."

Important Ruling on Earned Income

Physicians, lawyers and other professional men are entitled to the earned income credit up to the statutory limit on all professional fees, even though they employ assistants, according to an opinion handed down recently by the U. S. Commissioner of Internal Revenue at Washington.

Hundreds of Ohio physicians who employ office assistants will be interested in this matter and will be entitled to earned income credit in making out their next federal income tax return. The statement of the Commissioner—known as Mimeograph No. 3802—is stated:

"Under section 31 of the revenue act of 1928 an individual is entitled to claim against the tax computed on his net income a credit of 25 per cent of the tax which would be payable if his earned net income constituted his entire net income. Earned income under the statute means wages, salaries, professional fees, and other amounts received as compensation for personal services actually rendered.

"Under existing rulings it has been held that professional fees in order to constitute earned income must be received as compensation for personal services actually rendered, and in some instances taxpayers performing professional services who employ assistants in their offices have been denied the right to include all of the professional fees up to the statutory limit of $30,000 as earned income. In Mimeograph 3471 (C. B. V-2, 16), the following statement appears:

" 'If the business requires only a nominal capital and the income is derived principally from the personal services of the taxpayer, as a doctor or lawyer, the entire profits, not exceeding $20,000 [$30,000 under revenue act of 1928], may be considered as earned income. * * * If a taxpayer is engaged in the practice of a profession on his own account and employs an assistant over whom he exercises only a perfunctory supervision, the profit resulting from the labor of such assistant can not be regarded as earned income by the employer unless his total net income is less than $5,000.'

ALL FEES EARNED INCOME

"It was not intended to deny the taxpayer the right to consider the entire amount received as professional fees as earned income if the taxpayer is engaged in a professional occupation, such as a doctor or a lawyer, even though the taxpayer employs assistants who perform part or all of the services, provided the clients or patients are those of the taxpayer and look to the taxpayer as the responsible person in connection with the services performed.

"This mimeograph will also apply to income received as professional fees from a professional partnership, even though the partnership employs assistants who work on a salary basis, provided the clients or patients are those of some active member of the partnership and look to some active member of the partnership as responsible for the services performed.

"This mimeograph should not be construed as applying to 'any trade or business' in which both personal services and capital are material income-producing factors.

"The provisions of this mimeograph are also applicable to the determination of the earned income credit on amounts received as professional fees under the provisions of section 209 of the revenue acts of 1924 and 1926.

"Mimeograph 3471 is amended in so far as it is inconsistent with this mimeograph.

"Any inquiries made in regard to this mimeograph should refer to the number of the mimeograph and the symbols IT:E:RR."

Causes and Comparisons of Death In Relation to Occupation

A study of the causes of death by occupation among a large industrial group, published by the Bureau of Labor Statistics, U. S. Department of Labor, shows the changes in health conditions among the wage earners of the nation as compared with conditions revealed by a similar study for the years 1911 to 1913.

The present study analyzes the cause of death among 3,250,000 white male policyholders insured in the industrial department of the Metropolitan Life Insurance Company. Of this number 112,364 died during the years 1922, 1923 and 1924, and while information was not complete in regard to the occupational classification of the entire number, the occupation of 105,467 of these persons was known and it is this group which forms the basis of the study.

Workers 20 years of age may expect to live, on the average, five years longer today than at the time of the earlier study was made, according to data compiled in the recent study.

A comparative analysis of the statistics gathered in both studies reveals the following interesting facts:

Comparison of the principal causes of death in 1912 and 1923, the midyears of the two studies, shows that the most important causes in 1923 were organic diseases of the heart, with a rate of 188.7 per 100,000; tuberculosis of the respiratory system (149.7), and influenza-pneumonia (124). In 1912 tuberculosis of the lungs, with a rate of 319.9, was the leading cause of death, while organic diseases of the heart with a rate of 203.9 held second place, and nephritis with a rate of 178.1 was third.

At ages 15 to 24, in 1923, accidental or undefined violence was the leading cause of death, with tuberculosis of the respiratory system holding second place. The position of accidental violence and tuberculosis was reversed for the next two age periods, while after age 44 years diseases of the heart became the chief cause of death, with death rates of 253.3 in the age group 45 to 54, and of 681.3 in the 55-to-64 age group.

In the first of these periods tuberculosis was second in numerical importance, with a rate of 218.5; but in the latter it was superseded by cancer, which showed a rate of 436.2 and by nephritis and cerebral hemorrhage, each of which had a rate of 363.

Almost every cause of death has shown a downward trend in mortality. Tuberculosis of the respiratory system, one of the most important causes, has shown a very great improvement, the

death rate decreasing from 319.9 per 100,000 in 1912 to 149.7 in 1923, or a reduction of 53.2 per cent.

Workers 25 to 34 years of age and 35 to 44 years were the most favorably affected, the decrease amounting to 60.2 and 62.6 per cent, respectively. Nephritis has shown a significant, but smaller, decrease of 38 per cent, the rates declining from 178.1 for all ages in 1912 to 110.5 in 1923. The mortality rate from this disease showed the greatest decline in the age period 35 to 44, when it went down 55.7 per cent.

Mortality from pneumonia also showed the substantial reduction of 26.2 per cent, the rate in 1923 being only 92.5. The greatest decline in deaths from pneumonia occurred among the younger workers, in the age periods 25 to 34 and 35 to 44, the reduction amounting to 42.4 and 35.2 per cent, respectively.

The fatal accident rate was reduced from 140.6 in 1912 to 121.2 in 1923, a decline of 13.8 per cent.

Diseases of the heart showed little change for all ages, but changes in classification procedure have materially affected the comparability of the figures between the two periods. Heart disease, in spite of a decrease in the actual death rate, has become relatively more important owing to the much more rapid decline in the death rate from tuberculosis.

In the years 1911-1913, 12 per cent of all the deaths were due to heart disease, while 15.4 per cent of all the deaths in the period 1922-1924 were from that cause.

Mortality rates for some of the lesser causes of death have markedly decreased, notably typhoid fever, cirrhosis of the liver, and suicide, while the effects of better industrial hygiene are seen in the 50 per cent decline in the death rate from chronic lead poisoning, a disease of almost exclusively occupational origin.

Exceptions to the general downward trend of mortality are found in the rise of the cancer death rate, the rate for influenza, and for automobile accidents. The death rate for cancer increased from 77.6 per 100,000 in 1912 to 94.9 in 1923, a rise of 22.3 per cent, the rates increasing 15.5 per cent and 30.6 per cent, respectively, in the important age periods 45 to 54 and 55 to 64. The influenza rate went up 157 per cent and the rate for automobile accidents almost 500 per cent, for all ages, between the years 1912 and 1923. Increases of a lesser amount were registered for diabetes and for homicide.

Commenting on some of the facts brought out in the comparative study, a statement issued by the Bureau of Labor Statistics said:

"These facts * * * are of great importance, as it is only by the widespread dissemination of such facts that a sound means of bettering working conditions and still further raising the level of industry can be attained.

"Such a report covering, as it does, a typical cross section of the wage-earning population provides, therefore, reliable and useful information as to industrial morbidity conditions for industrial physicians, health officers and private practitioners.

"Labor arbitrators, also, and others interested in the improvement of working conditions will learn about some of the less satisfactory aspects of the present industrial situation and, having this knowledge, will be in a far better position to find a solution for the problems."

Data on Narcotic Addiction

Less than 3 per cent of a group of 2,000 violators of the antinarcotic law were high-school graduates, according to a recent statement by the Public Health Service. These violators were arrested during a three-months' period of last year, and a detailed survey of them made, it was said.

Drug addiction is an economic evil, it was pointed out, since it was observed that a large proportion of those addicted to habit forming drugs were irregularly employed, and mainly dependent or of marginal economic circumstances.

In some instances the habitual use of alcohol is connected with drug addiction, it was stated; but this is generally not so, except in so far as the early history of some addicts indicates a chronic use of alcohol. The individual who resorts to the excessive and habitual use of alcohol appears to be somewhat different in mental make-up from those who resort to narcotic drugs, it was explained.

The quantity of narcotic drugs necessary to maintain an addiction is quite variable, it was shown, and depends upon the mental background of the addict and other factors. The largest class of this group studied used from 5 to 15 grains daily, it was pointed out.

The average age of the addict is 38 years, it was stated, though, of this group studied, almost one-half of the number of the addicts contracted the habit under the age of 24. Of the approximate 1,600 addicts investigated, only 34 had finished high school and only 51 had attended college, it was disclosed.

The number of addictions found among suburbanites is negligible, it was said; the great majority came from either the cities or strictly rural districts.

Drug addicts seek treatment of this addiction for various reasons, but the chief reasons are either because friends and relatives insist upon their taking the treatment; because they wish to escape the slavery of the habit; or because they wish to impress the law authorities with their attempt of curing themselves, it was said. It is because of these reasons that the cure and treatment of the addiction varies with the individual, it was said.

Deaths in Ohio

Elwood E. Bevington, M.D., New Paris; Starling Medical College, Columbus, 1901; aged 52; member of the Ohio State Medical Association and Fellow of the American Medical Association; died June 12 of acute indigestion. He practiced at Sulphur Springs for five years before locating in New Paris. Surviving him are his widow and one daughter.

John H. Jenkins, M.D., Delphos; Eclectic Medical College, Cincinnati, 1895; aged 56; died July 4 following a year's illness. Dr. Jenkins had practiced for 35 years in Delphos and Allen County. He is survived by his widow, two brothers and two sisters.

William McCandless Johnston, M.D., Lisbon; Western Reserve University, School of Medicine, 1876; aged 77; former member of the Ohio State Medical Association; died June 22 following a long illness. Dr. Johnston had practiced in Sewickley, Pennsylvania, and for eight years served as warden of the Western penitentiary, Pittsburgh, before locating in Lisbon nine years ago. He was a veteran of the Spanish-American War. His widow and four daughters survive him.

Frederick P. Kreider, M.D., Van Wert; Ft. Wayne College of Medicine, Fort Wayne, Indiana, 1893; aged 63; member of the Ohio State Medical Association and the American Medical Association; died July 10 of heart disease. Dr. Kreider was a veteran of the World war, and a former mayor of Van Wert.

Fremont M. Marshall, M.D., Coshocton; Western Reserve University School of Medicine, 1889; aged 65; member of the Ohio State Medical Association, and Fellow of the American Medical Association; died July 10 of heart disease. He had been in ill health for more than a year. Dr. Marshall had practiced in Coshocton for many years, and at the time of his death, was president of the Coshocton County Medical Society. He is survived by his widow, one daughter, one son; three brothers and three sisters.

Daniel W. McQueen, M.D., Camden; Medical College of Ohio, Cincinnati, 1895; aged 65; died June 16, after an illness of several months. Dr. McQueen had practiced at Camden nearly forty years. He is survived by his widow and one daughter.

Walter S. Mumaw, M.D., Kansas; Detroit College of Medicine and Surgery, 1897; aged 65; former member of the Ohio State Medical Association; died June 17 from self-inflicted bullet wounds. Dr. Mumaw has been suffering from cancer for more than a year. He had practiced at Kansas for thirty years. Surviving him are his widow, three sons and one daughter; two brothers and three sisters.

Lewis R. Mundhenk, M.D., Dayton; Medical College of Ohio, Cincinnati, 1874; aged 81; former member of the Ohio State Medical Association; died June 16. Dr. Mundhenk had practiced at Middletown for many years, until his retirement last year. He is survived by one son.

Harry F. Patten, M.D., Dayton; Vanderbilt University School of Medicine, Nashville, Tenn., 1901; aged 54; member of the Ohio State Medical Association and the American Medical Association; died July 11 of heart disease. Dr. Patten began practice in Dayton following completion of his internship at a Cincinnati hospital. At the time of his death he was serving as physician for the board of health. Surviving him are his widow and a brother.

Dade Trueman Phillips, M.D., Barnesville; Starling Medical College, Columbus, 1897; aged 62; member of the Ohio State Medical Association and the American Medical Association; died June 25 of heart disease. Dr. Phillips, in his earlier years, taught in the public schools in Monroe county, meanwhile reading medicine under Dr. G. W. Steward of Jerusalem. Following graduation he began practice at Morristown. In 1914 he moved to Barnesville where he continued in practice until a few months ago. Dr. Phillips had just returned from Lakewood hospital when stricken. His widow, three brothers and four sisters survive him.

Orville R. Young, M.D., Columbus; Columbus Medical College, 1884; aged 75; died May 8 of myocarditis. Dr. Young had practiced in Baltimore and Rushville, before locating in Columbus in 1912. He is survived by his widow and two daughters.

KNOWN IN OHIO

G. Harold Cope, M.D., Roma, Texas; Ohio State University School of Medicine, Columbus, 1926; aged 29; Fellow of the American Medical Association; died July 1, at the home of his wife's parents near Kenton. Dr. Cope located in Texas, immediately following his graduation, in an effort to improve his health. He continued his practice there until a short time ago. Surviving him are his widow, one daughter; his parents, one brother and one sister.

NEWS NOTES of OHIO

Columbus—Dr. Charles A. Doan, formerly with the Rockefeller Institute, New York City, has assumed his new duties as head of the newly-created Department of Medical and Surgical Research, College of Medicine, Ohio State University. Dr. Bruce K. Wiseman, graduate of the College of Medicine, Indiana University, has been named assistant director. Dr. Samuel T. Mercer, graduate of Ohio State, has been named to the staff of the new department.

Youngstown—Incorporation papers have been filed by the Clinic Corporation, which according to Dr. Charles Hauser, president, plans the erection of a $100,000 building for a medical and surgical clinic. Other officers of the corporation are: Vice president, Dr. W. E. Ranz; treasurer, Dr. J. E. Ranz; secretary, Dr. James B. Nelson; assistant secretary, Dr. J. T. Porembski.

Pickcrington—Announcement has been made of the marriage of Miss Elizabeth Ann Sites, Pleasantville, and Dr. Kenneth W. Taylor, of Pickerington.

Troy—Offices have been opened here by Dr. Frank Hudson, who recently completed his internship at the Springfield City Hospital.

Defiance—The Defiance Rotary Club gave a luncheon recently in honor of the 80th birthday anniversary of Dr. W. S. Powell, veteran Defiance physician.

Cleveland—Dr. Elliot C. Cutler, head of the Department of Surgery, School of Medicine, Western Reserve University, has sailed for England where he will attend the meeting of the Society of Clinical Surgery at London and then tour England, Ireland and Scotland.

Cleveland—Portraits of seven members and former members of the faculty of the School of Medicine, Western Reserve University, were presented to the university as part of the commencement exercises of the Department of Anatomy. The portraits were of Drs. George W. Crile, Roger G. Perkins, Isaac Newton Himes, Charles Franklin Hoover, Frank Emory Bunts, Carl A. Hamann and G. Neil Stewart.

Cleveland—Dr. S. S. Hudack, an intern at St. Luke's Hospital, has been appointed to the pathological department of the Rockefeller Institute.

Cleveland—Dr. H. J. Gerstenberger is spending the summer studying in Europe and attending scientific meetings at various European universities.

Cleveland—Dr. John H. Nichols is taking six months of post-graduate work at Vienna and London.

Cleveland—Dr. Victor C. Myers, professor and head of the Department of Biochemistry at the School of Medicine, Western Reserve University, has been awarded the honorary degree of Doctor of Science by his alma mater, Wesleyan University, Middletown, Conn.

Dayton—Dr. R. C. Pennywitt is a candidate for coroner of Montgomery County on the Republican ticket.

Martins Ferry—Dr. L. D. Covert, Bellaire, told of the advances in scientific medicine and in the hospital field during the past decade in a speech before the Martins Ferry Kiwanis club.

Blanchester—Offices have been opened here by Dr. John G. Anderson, who recently completed his internship at the Good Samaritan Hospital, Cincinnati.

Columbus—Dr. Robert B. Drury is on a two-months vacation at his fishing lodge, Racefield, Quebec.

Port Clinton—Dr. S. G. Marino, formerly of Cleveland, has joined the staff of the Pool Hospital here.

Mt. Sterling—Dr. F. A. Lutz of Mt. Sterling was named to the executive committee of the Association of Railway Surgeons of the Baltimore and Ohio Railway Company.

Galion—The Galion hole-in-one club has a new member. Dr. M. L. Helfrich sank his mashie tee shot on the No. 4 hole at the Galion Country Club.

Ashtabula—Dr. William Millberg is taking a year's post-graduate course in surgery and urology at the New York Post-Graduate School and Hospital.

Dayton—Upon his return from a six-months leave of absence, Dr. Leo Schram was reappointed a city district physician.

Columbus—Announcement has been made of the marriage of Miss Olive E. Hertel and Dr. E. M. Blake, both of Columbus. Dr. Blake was a member of the 1930 graduate class at the College of Medicine, Ohio State University. They will reside in Columbus.

Columbus—Dr. S. R. Fairchild sustained a broken right arm when a truck near which he was standing was struck by another machine.

Xenia—Dr. W. A. Galloway has been awarded a 15-year service badge in recognition of his interest in the Boy Scout movement in Xenia.

Columbus—Dr. Robert W. Kropp has returned from Saranac Lake, N. Y., where he took post-graduate work at the Trudeau Tuberculosis Institute.

Zanesville—Dr. and Mrs. O. I. Dusthimer and son, John, are on a trip abroad. Dr. Dusthimer will attend clinics at some of the larger European medical centers.

Athens—Dr. T. A. Copeland has returned from

several months in Europe. He attended eye, ear, nose and throat clinics at Berlin and Heidelberg.

Piqua—Announcement has been made of the engagement of Miss Miriam Thedieck, Sidney, to Dr. William W. Weis of this city.

Barberton—The marriage of Miss Katherine Seton-Adamson, Waterloo, Ontario, Canada, and Dr. Verne G. Ghormley, of this city, has been announced.

Dover—Dr. R. E. Wolf, Uhrichsville, escaped with cuts and bruises in an automobile collision near here.

Cleveland—Dr. Lorenz Bohler, chief surgeon and director of the Vienna Accident Hospital, was a recent guest of the Cleveland Clinical Club and Dr. Walter G. Stern.

Canton—Dr. Fred H. Stires, formerly of Malvern, has announced the opening of offices in the First National Bank building, practice limited to general surgery.

Logan—Dr. and Mrs. M. H. Cherrington, who sailed June 28 from New York for a sojourn in Europe, expect to return about September 1.

Greenville—Dr. Charles F. Frankman, formerly with the Miami Valley Hospital, Dayton, has moved to Greenville where he will be associated with Dr. W. H. Matchett in the practice of medicine.

Toledo—The following Toledo physicians are serving as members of the medical staff at the Sam Davis Children's Health Camp: Drs. Foster Myers, John Lavan, F. A. Leslie, Fred Eyestone, F. W. Worley, R. L. Kennedy, John T. Murphy, Paul Moore, C. D. Mebane, S. D. Griffen, B. S. Dunham, B. G. Chollett, Howard Holmes, John Spooner, L. I. Clarke and Barney Hein.

Columbus—A testimonial dinner was given at the Columbus Country Club recently by the members of the eye, ear, nose and throat staff at Grant Hospital in honor of Dr. C. F. Clark, for more than 30 years a member of the eye, ear, nose and throat staff at Grant.

Cincinnati—Dr. William S. Keller was reelected president of the Cincinnati Social Hygiene Society. Dr. Elizabeth Campbell was named first vice president, and Dr. E. W. Mitchell, second vice president.

Clyde—Dr. John D. Currence has moved to New York City where he has accepted a position as medical director of the Associated Sanitoria of New York City.

Cincinnati—Dr. George B. Topmoeller, Dr. John D. Miller and Dr. Clifford J. Straehley are taking special work at the Vienna Hospital, Vienna, Austria.

Bucyrus—Announcement has been made of the marriage of Miss Carol P. Vollrath and Dr. Claude A. Lingenfelter, both of this city.

Cincinnati—Dr. James J. Jennie has been appointed house physician at the Hotel Gibson.

HOSPITAL NOTES

—Dr. Clark S. Fitzmorris has been appointed assistant resident physician at the Cincinnati General Hospital, succeeding Dr. James Birch, resigned.

—Mrs. Gale Harmon Harper, formerly of Cleveland, has been appointed superintendent of the Jane Case Hospital, Delaware, succeeding Miss Madelaine Kemp.

—Dr. John F. Lyons, an intern at St. Mary's Hospital, Cincinnati, last year, has been appointed resident physician.

—Dr. W. H. Wyckoff has been appointed a member of the board of trustees of the Bedford Hospital.

—Miss Ellen E. Janson, superintendent of nurses at the Children's Hospital, Columbus, has been named superintendent of the institution, succeeding Dr. Marion Reynolds, resigned. Announcement also has been made of the appointment of Dr. George Tedrow, Crooksville, as a member of the staff.

—A $75,000 bond issue for a new county hospital will be submitted to the voters of Portage County in November. A site and $50,000 in cash has been donated toward the project by Henry W. Robinson.

—An operating chair has been presented to the Barberton Citizen's Hospital by seven members of the staff, Drs. J. M. Canter, H. L. Smallman, W. E. McCorkle, George R. Taylor, Joseph J. Weber, H. A. Finefrock and H. B. Harper.

—Miss Geneva Leonard, formerly of the Good Samaritan Hospital, Galion, has been named assistant superintendent of the Marion City Hospital.

—Speakers at a recent conference of superintendents and directors of tuberculosis hospitals of the state, held in Dayton, were: Dr. C. O. Probst, Columbus; Dr. Louis Mark, Columbus; D. W. Iddings, Dayton; Dr. E. E. Bishop, Cincinnati, and J. E. Bauman, State Department of Health.

—Dr. George B. Topmoeller, chief of staff of St. Mary's Hospital, Cincinnati, has announced the appointment of the staff of Dr. Karl Zwick in the department of dermatology, and Dr. K. V. Kitzmiller, in the department of pathology.

—A 30-bed addition to the Babies' and Children's Hospital, Cleveland, has been opened.

—Construction of a $66,000 addition to the nurses' home at Mercy Hospital, Columbus, has been announced by Dr. Joseph Price, director of the hospital. Plans also are under way for the construction of an out-patient department, Dr. Price said.

—Shelby County Memorial Hospital at Sidney will be dedicated early in August.

—Civic clubs of Chillicothe are discussing a campaign for funds with which to build an addition to the City Hospital.

—Contracts have been let for the construction of an addition to the Mary Rutan Hospital, Bellefontaine.

—Dr. Hugh S. Cumming, surgeon-general of the U. S. Public Health Service, was the principal speaker at the dedication of the new $1,800,000 U. S. Marine Hospital, Cleveland. Others who spoke were Dr. George W. Crile, Dr. Torald Sollman, Dr. H. L. Rockwood and Dr. V. C. Rowland.

—Children's and White Cross hospitals, Columbus, were among the beneficiaries who will share the estate of the late Mary J. Ross, Columbus.

—Dr. Merle Flenner was named chief of staff of Fort Hamilton Hospital, Hamilton, at a recent meeting of the staff.

—Miss Elizabeth M. McIntyre has resigned as superintendent of nurses and principal of the nursing school at the Springfield City Hospital.

—Announcement has been made of the resignation of John C. Ransom as superintendent of the Toledo Hospital. Mr. Ransom will become assistant director of Johns Hopkins Hospital, Baltimore.

—Voters of Guernsey County will vote in the fall on a bond issue for the erection of a county hospital.

—Trustees of the Springfield City Hospital have announced the following appointments to the staff of the institution: Surgery, Drs. E. P. Greenawalt, A. H. Potter, J. H. Poulton, J. H. Rinehart, Joseph Webb and Howard Austin; medicine, Drs. F. P. Anzinger, Clement L. Jones, A. H. McIntyre and R. R. Richison; anesthesia, Drs. E. R. Brubaker and J. H. Riley; eye, ear, nose and throat, Drs. D. W. Hogue, J. C. Easton and F. A. Hartley; orthopedics, Dr. C. E. M. Finney; pediatrics, Drs. H. H. Hildred and H. B. Martin; obstetrics, Drs. C. S. Ramsey and A. K. Howell; neurology, Drs. A. Richard Kent and A. A. Gavey; urology, Dr. N. L. Burrell; *X*-ray, Dr. E. R. Brubaker; pathology, Dr. R. S. Fidler; outpatient department, Drs. A. A. Gavey, G. M. Lane and H. B. Elliott; dietition, Miss Emily L. Scisson; dentistry, Drs. E. G. Benham, Neil Farrell and George Fitzgerald.

—Dr. J. C. Tritch was re-elected chief of staff and Dr. J. V. Hartman, assistant chief, at a recent meeting of the staff of the Findlay Home and Hospital.

—New wing of the Mercy Hospital, Canton, has been opened to the public.

—Rush E. Wallace, formerly with the Walter Reed Hospital, Washington, D. C., has been appointed laboratory technician and assistant *X*-ray technician at the McKitrick Hospital, Kenton.

—Hundreds of residents of Circleville attended the recent dedication of the Berger Hospital. Members of the staff of the hospital are: Drs. Henry C. Allen, Blenn R. Bales, Dudley V. Courtright, George R. Gardner, Austin W. Holman, Ralph S. Hosler, Harry D. Jackson, Howard Jones, Lloyd Jonnes, Albert F. Kaler, Jacob A. Knight, George G. Leist, Delos H. Marcy, John B. May, Loy C. Schiff, Edwin S. Shane, Glenn D. Sheets, Clinton G. Stewart, Addison L. Stump and William S. Williams.

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PROMPT AND FULL REPORT

PUBLIC HEALTH NOTES

—Tuberculosis (all forms) during the past 15 years, caused 85,767 deaths in Ohio, of which 46,008 were males and 39,759 females, according to a recent study prepared by the Division of Vital Statistics, State Department of Health.

In 1915, tuberculosis ranked second as a cause of death in the state, but since that time the decline has been very rapid until 1929 it ranked seventh as a cause of death, being superseded by diseases of the heart, cerebral hemorrhage, cancer, (all forms), pneumonia, accidental deaths and nephritis.

In 1915 there were 6,668 deaths from tuberculosis with a rate of 131.04 per 100,000 population as compared with 4,587 in 1929 with a rate of 68.11. This is the lowest death rate for tuberculosis ever recorded in Ohio. The decrease in 1929, as compared with 1915, was 2,081; the greater decrease being among the males, 1,240, and among the females, 841.

In the age period from 25 to 29, among the males, there were more deaths than any other age period. Among females the greatest number of deaths was found in the age period 20 to 24 years. In the age period from 15 to 24 years, more females died than males; but in all other age periods, the male deaths predominated.

During this period there were 72,735 deaths among the white race as compared with 11,878 among negroes. In 1915 there were 6,037 deaths among the whites and in 1929, 3,663, a decrease of 2,394. However, among the negroes there were only 631 deaths in 1915 against 924 in 1929, an increase of 293.

In 1915 tuberculosis caused the death of 10 per cent of all the deaths reported in Ohio, but in 1929 this was reduced to only 5.6 per cent of all the deaths reported. Among the whites in 1915 tuberculosis deaths were 9.5 per cent of all deaths, and in 1929 only 4.8 per cent. Among the negroes in 1915 tuberculosis caused 22.6 per cent of all the deaths, compared with 14.6 per cent in 1929.

—Education Committee of the Cincinnati Public Health Association has launched a city-wide periodic health examination campaign. Thousands of leaflets have been distributed and an extensive program of public addresses has been arranged.

—Dr. H. T. Clapp and Dr. F. P. Schumaker have been elected members of the Cuyahoga County Board of Health.

—A 46-page booket analyzing the influenza-pneumonia mortality in a group of about 95 cities in the United States in the period 1920-1929 has been compiled by Selwyn D. Collins, associate statistician of the U. S. Public Health Service and may be obtained from the Superintendent of

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District No. 9—1930 Robinwood Ave., Apartment 40, "The Scotwood," Toledo, Ohio. Phone: Main 7962
District No. 12—398 N. Garfield Ave., Columbus, Ohio. Phone FAirfax 3615
District No. 15—Portsmouth General Hospital, Portsmouth, Ohio. Phone: 559

Documents, Washington, D. C., for 10 cents per copy.

—Ohio Society of Sanitarians have recommended to State Welfare Director H. H. Griswold and State Director of Finance Harry D. Silver the "immediate necessity of legislation to provide a children's pavilion at the Mt. Vernon State Sanitarium for the care, treatment and education of tuberculous children in a building or buildings separate and apart from the buildings used for adult patients". The society estimates that the erection of a 100-bed pavilion would cost about $300,000. Mr. Griswold has been asked to include such an item in his budget to be presented to the next legislature.

—Dr. A. I. Fink, Cleveland, formerly on the staff of Mt. Sinai Hospital, has joined the medical field force of the State Department of Health as junior physician in the Division of Child Hygiene.

—Self administration of iodin in attempts to prevent or treat endemic goiter is condemned in a recent bulletin issued by the U. S. Public Health Service.

—About 200 small water supplies along the main highways throughout the state have been inspected and marked safe by the State Department of Health.

—An interesting study of death rates by season of the year covering the past 15 years has been made among industrial policyholders of the Metropolitan Life Insurance Company. The outstanding items shown by the study are:

Since the great influenza pandemic of 1918, the mortality rate at every season has been markedly lower than before the pandemic.

Since 1920 (when a recrudescence of the influenza epidemic occurred), there has been no decided trend of the death rate, upward or downward, at any season of the year.

Uniformly, the summer season has enjoyed the lowest death rate.

The winter season registered the highest death rate in every year, with the exception of 1918, when the huge autumn death toll of influenza raised the mortality to an unprecedented figure either for autumn or for any other season.

During the period 1915-1929, the years 1927 and 1928 registered the lowest winter death rate; 1929, the lowest spring death rate; 1923, the lowest summer death rate, and 1923 and 1925 the minimum fall death rate.

The winter of 1920 recorded the lowest mortality figure ever shown for that season.

The greatest variability in the death rate, from year to year, has occurred in the winter season, due, for the most part, to relatively high or low incidence of influenza. The summer season shows the least change in the death rate from year to year.

—Dr. Joseph H. Kinnaman, formerly health commissioner of Topeka, Kansas, has assumed his duties as chief medical director of the Cincinnati Health Department, succeeding Dr. L. W. Heizer, resigned.

New and Nonofficial Remedies, 1930. Cloth. Price, $1.50. Pp. 481; xlviii. Chicago: American Medical Association, 1930.

The present edition contains all of the features that have in the past made New and Nonofficial Remedies such a reliable and efficient a guide to the physician who wishes to inform himself on the newer medical preparations: logical classification of preparations, with authoritative articles on each class; complete and carefully written descriptions of preparations; elaborate indexes; and a useful cumulative list of references to the literature on articles not accepted by the Council.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1929. With Comments that have appeared in *The Journal.* Cloth. Price $1. Pp. 81. Chicago: American Medical Association, 1930.

This is the volume in which the Council annually collects the reports on articles found unacceptable during the year. This edition contains also several interesting preliminary reports on preparations which show promise but for which the evidence is not yet sufficient to justify acceptance by the Council. Reports are given on the products rejected by the Council.

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News Notes From County Societies and Academies

First District

Adams County Medical Society met at West Union on Wednesday, June 18, with a good attendance of members and guests present. The program was as follows: "Case Reports of Multiple Neuritis caused by Poisoned Jamaica Ginger", by Dr. Sam Clark, Cherry Fork; "Case Reports in the Use of Spinocaine and Gravocaine in Spinal Anesthesia", by Dr. T. G. McCormick, Portsmouth; "Observations and Assistance at Children's Eye Clinic". Officers elected for the coming year are: President, Dr. Ray Vaughn, West Union (re-elected); secretary-treasurer, Dr. O. T. Sproull, West Union (re-elected); legislative committeeman, Dr. S. J. Ellison, West Union; delegate to state meeting, Dr. A. R. Carrigan, Manchester; alternate, Dr. Sam Clark, Cherry Fork. The society was entertained during the noon hour at the Northside Hotel by its West Union members. The next meeting of the society will be held at Mineral Springs Hotel, on August 20, as guests of the president, Dr. Vaughn.—News Clipping.

Warren County Medical Society held its regular meeting at Harmon Hall, Lebanon, on Tuesday afternoon, July 1. The importance of pure milk supplies to the health of a community was discussed in the following papers: "Normal Milk", by Mr. Rosell Brewer; "Foreign Matter and Bacteria in Milk and Milk Products", by Mr. Seldon Hamilton; "Certified Milk", by Dr. Paul W. Tetrick; and "Pasteurized Milk", by Dr. James H. Arnold. Because of the mutual interest in the program, all veterinarians in the county were invited to attend the meeting.—News Clipping.

Second District

Greene County Medical Society held its regular meeting at the Iron Lantern, Xenia, on Thursday morning, June 5. Following a short business session, several case reports were presented, followed by a general discussion. Plans were made to hold the next meeting in the form of a picnic at the Xenia Country Club.—News Clipping.

Shelby County Medical Society gave its annual reunion and dinner to the Miami County Medical Society on Thursday, June 5, at the Sidney Country Club, with 12 members present from Miami County and 17 from the Shelby County Society. Dr. D. C. Houser, Urbana, president-elect of the Ohio State Medical Association, spoke on "Medical Organization", and Dr. E. M. Huston, Dayton, Councilor of the Second District, spoke on "Advancement of Medicine during the last Twenty-

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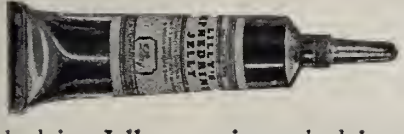
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five Years". Dr. M. F. Hussey, president of the Shelby County Society, acted as toastmaster, and invited Dr. Murray, president of the Miami County Society, to preside. This was a very enjoyable meeting of the two Societies.—B. S. Stephenson, Secretary.

Third District

Hancock County Medical Society met at the Findlay Country Club, Thursday afternoon, June 12. An afternoon at golf was followed by a banquet, and a program including an address on "Caesarian Section with a Review of Fifty Cases", by Dr. C. A. O'Connell, chief of obstetrical staff, St. John's Hospital, Cleveland. Dr. R. J. N. Schraff, member of the surgical staff of the same hospital, spoke on "Functional Treatment of Fractures of the Leg".—News Clipping.

Logan County Medical Society held its regular meeting at Hotel Ingalls, Bellefontaine, on Friday evening, June 13. Following a dinner at 6:30, Dr. W. H. Carey, member of the Program Committee, introduced Dr. Andrews Rogers, Columbus, professor of Obstetrics, Ohio State University College of Medicine, who gave an interesting and scholarly address on "Obstetrics". The meeting was a pleasant reunion for those members of the society who have taken work under Dr. Rogers. Dr. J. P. Harbert, president of the Society, presided.—News Clipping.

Van Wert County Medical Society met for its regular monthly meeting on Tuesday evening, June 17, at the Y.W.C.A., Van Wert. Following a dinner, Dr. Harold L. Stelzer, Lima, gave a talk on "Anesthesia". The next regular meeting of the Society will be held in September.—News Clipping.

Wyandot County Medical Society held a meeting at the Public Library, Upper Sandusky, on Thursday evening, June 12, with a good attendance. Dr. B. A. Moloney, president of the Society, presided. An illustrated lecture on "The Treatment of Fractures" was presented by Dr. A. M. Steinfeld, of Columbus; and Dr. William Morrison, also of Columbus, who spoke on "Anesthetics". Other speakers included Dr. S. R. Bame, of Carey, and Dr. I. N. Bowman, Upper Sandusky. Dr. Bowman, in his talk, discussed the contrast between the country doctor and the present day specialist.—News Clipping.

Fourth District

Putnam County Medical Society met at Pandora, on Thursday evening, July 3 at School House. A six o'clock dinner was served. The meeting was under the auspices of Drs. P. D. Bixel and H. A. Neiswander, of Pandora. The program was as follows: "Romance of the White Blood Cells", by Dr. H. W. Berkey, professor of Chemistry and Biology, Bluffton College; "Arteriosclerotic Diseases of the Heart, with Some Phases of Heart Block", by Dr. F. M. Wiseley, of

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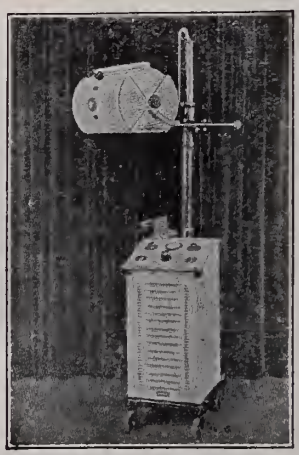
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Findlay. Dr. Berkey's paper was interesting from the standpoint of a scientist. He gave an historical review of scientific progress related to medicine, discussed the discovery of circulation of the blood, introduction of the microscope; Jenner's vaccination for smallpox; Pasteur's contributions to medicine, and Lister's advances to science. He spoke of the size, shape, motion, number and functions of the white blood cells; discussed quite thoroughly phagocytosis and immunity. His paper was very well received.

Dr. Wiseley's subject was very well given, and appreciated by the doctors. He stressed the diseases incident to arteriosclerotic conditions; spoke of heart block; reported some cases. He presented cardiograms which were passed out among the doctors to illustrate his subject. The meeting was well attended and was considered a success. The ladies were present, also Professor Steiner and wife, of Pandora. The Society will hold its next meeting in September.—J. R. Echelbarger, Correspondent.

Sixth District

Ashland County Medical Society met at Samaritan Hospital, Ashland on June 13. A paper on "Cholescystography" was presented by Dr. E. L. Clem, with which he used *X*-ray demonstrations. Dr. H. M. Gunn reported on the number of members of the Society who are now members of the Ashland Credit Bureau. A resolution on the death of Dr. Jacob Fridline, presented by a committee composed of Drs. W. F. Emery, O. J. Powell, and L. G. Sheets, was unanimously adopted.—News Clipping.

Portage County Medical Society held its regular meeting at the home of Dr. Emily J. Widdecombe, the secretary of the Society, on Thursday evening, June 7. Routine business, including a report of the annual meeting of the State Association in Columbus, May 13, 14 and 15, and presentation of case reports, made up the program for the evening.—News Clipping.

Seventh District

The Annual Meeting of the Seventh Councilor District was held at the East Liverpool Country Club on Friday, July 11. Dr. George W. Crile, Cleveland, addressed the Society on the subject of "Thyroidectomy—Indications, Methods, Complications, End-Results". Rabbi I. E. Philo, of Youngstown was the speaker at the dinner at six o'clock. The wives of physicians were entertained in the afternoon at bridge, and members spent the morning on the golf course.—Bulletin.

Jefferson County Medical Society held its annual banquet Friday evening, June 27th, at the Steubenville Country Club. The banquet was followed by an interesting talk illustrated with lantern slides by Dr. C. C. Perry, of Cleveland. His subject was "Ano-Rectal Diagnosis and Treat-

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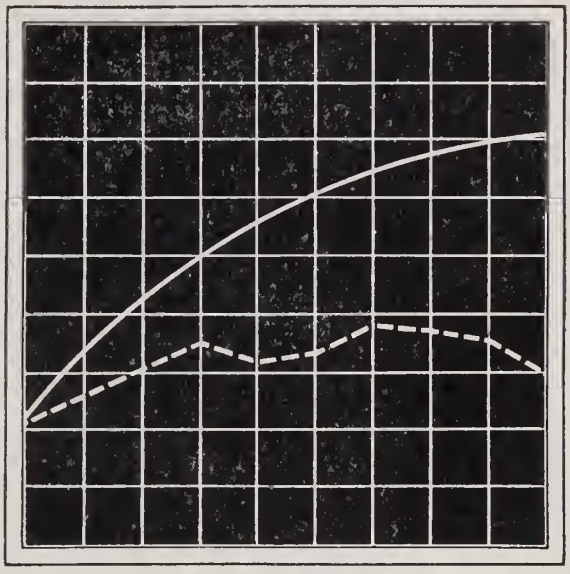
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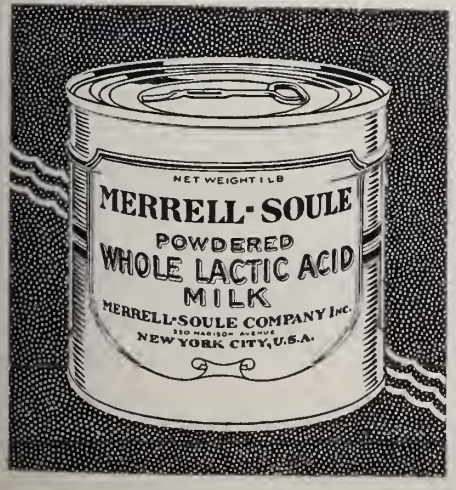
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ment with Particular Attention to Colitis and Differential Diagnosis".—M. E. Rosenblum, Secretary.

Tuscarawas County Medical Society met in regular session at the Buckeye Hotel, Uhrichsville, on Thursday evening, June 12, with twenty members present. An interesting program was presented by Drs. B. O. Burkey, A. H. Syler and P. J. Alspaugh. A surprise feature of the meeting was the banquet at which members were guests of Dr. D. W. Shumaker, of Dover.—News Clipping.

Eighth District

Muskingum County Academy of Medicine met at the American Legion rooms, Zanesville on Wednesday evening, June 4 for its regular meeting. Dr. M. A. Loebell gave an illustrated talk on recent developments in cancer research.—News Clipping.

Ninth District

Hocking County Medical Society held its regular quarterly meeting on Monday, June 16 at the Easterling Club rooms, Logan. A splendid chicken dinner was served at 21:30 to 25 physicians from Hocking, Athens and Perry County Societies. After dinner, Dr. O. V. Donaldson, president of the Society, introduced Drs. A. M. Steinfeld and W. B. Morrison, of Columbus, who both gave very interesting talks on "Modern Methods in Treatment of Fractures", with lantern slide illustrations. All those present expressed themselves as very highly pleased with the meeting in general. Following adjournment of the open meeting, the Hocking County Society held a short business session and adjourned to the September meeting.—M. H. Cherrington, Secretary.

Scioto County—The regular meeting of the Hempstead Academy of Medicine was held on Monday evening, July 14 at the Portsmouth Country Club. Attorneys of Scioto County were guests of the Academy. A fried chicken dinner at 6:30 was followed by an address by Judge Will P. Stevenson, of West Union.—Bulletin.

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

The regular meeting of the Columbus Academy of Medicine was held on Monday night, June 16 at the Columbus State Hospital. Program was furnished by the superintendent, Dr. Wm. H. Pritchard, and staff.—Bulletin.

Knox County Medical Society met at the Alcove, Mt. Vernon, on June 19 for a luncheon meeting. The visiting speaker was Dr. William E. Lower, of Cleveland.—News Clipping.

Pickaway County Medical Society held its meeting on Friday evening, June 6, at the new Berger Hospital, Circleville, with a splendid at-



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tendance. The latest type of electrocardiograph was demonstrated by a representative of the General Electric Company. Mrs. D. V. Courtright, president of the Circleville Benevolent Society, gave an interesting talk on "Public Health in Circleville". Miss Effie Folsom gave a report of the conclusion of two month's work on a tuberculosis survey of the county.—News Clipping.

Eclectics Elect

The following officers were elected at the Sixty-Sixth Annual Meeting of the Ohio State Eclectic Medical Association held in Columbus at the time of the annual meeting of the National Eclectic Medical Association:

President-elect, Dr. S. W. Mattox, Marion; vice president, Dr. W. A. Stoutenborough, Columbus; recording secretary, Dr. W. L. Layport, Cincinnati; corresponding secretary, Dr. J. F. Holtzmuller, Forest; treasurer, Dr. Frank L. Thomas, Marion. Dr. R. B. Taylor, Columbus, was installed as president for 1930-31. Dr. Charles R. Campbell, Cincinnati, was elected president-elect of the national organization.

Here's a Laugh on the White House Conference

When President Hoover appointed members of the investigating sub-committees for the White House Conference on Child Health and Protection there was considerable comment on the relatively few practicing physicians selected for committee posts.

Those who have been inclined to be even the least bit skeptical about the program outlined for the White House Conference will undoubtedly find the following paragraphs, taken from an interview published in the *Cincinnati Enquirer*, interesting:

"That national recognition to the chiropractic movement has been given by President Hoover was announced yesterday by Dr. B. A. Sauer, executive secretary of the American Chiropractic Association, of Syracuse, N. Y., who arrived here to arrange for the preliminary details of the chiropractors' association convention July 14-19.

"Dr. Sauer said that President Hoover had invited the American Chiropractic Association to send delegates to the White House conference called by the President next fall to consider problems of 'Child Health and Protection Against Disease.'

"The chiropractic executive said that one of the principal duties involved in the closing sessions of the convention would be the selection of delegates to the White House Conference by the Bureau of Research of the American Chiropractic Association."

We do not vouch for the authenticity or accuracy of the foregoing statements.

Mr. Sauer may have been having a subluxation

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at the time the *Enquirer* reporter interviewed him. Then again, he may not.

A group of practitioners which denies the bacterial origin of disease and is unqualified to recognize infectious and communicable diseases; which attempts to treat all kinds of diseases and ailments with the single "adjustment" method; which opposes and rejects the value and use of antitoxins, vaccination, anesthetics, antidotes for poison, surgery, etc.; which can boast of only a few months schooling in comparison to that taken by the regular physician; which has no legal recognition in many states; which discredits the discoveries of preventive medicine; and which sees no need for quarantine laws should be of great value to the White House Conference committees when they meet in Washington next fall to chart out ways and means of protecting and bettering the health of the children of the nation.

If the disciples of "B. J." are given the recognition at Washington next fall which they seem to think they are going to get, the casual observer would be inclined to predict that Mr. Hoover's White House Conference promises to be a huge success—*for the chiropractors.*

Insanity Pleas

Constitutionality of that section of Ohio's new criminal code providing for the procedure to be followed in pleas of insanity in criminal cases was in effect upheld by the Ohio Supreme Court recently when it refused to review the appeal of a Cincinnati man under sentence of death.

The section of the code attacked by counsel for the condemned man is that which requires a defendant who is going to make a plea of insanity to make such a plea in writing before the case comes to trial. Attorneys for the defendant had contended that their client had been barred from a jury trial because the trial judge took away from the jury the right to consider the question of his sanity on the grounds that he had not made his insanity plea prior to the opening of the trial. This provision of the code, the defendant's counsel charged, "attempts arbitrarily to create a conclusive presumption against the accused", thereby violating the constitutions of the United States and of Ohio.

In a recent decision, Attorney General Bettman interpreted the provisions of the criminal code with reference to the procedure to be followed when an accused person pleads insanity. Bettman held that in case an accused man who pleads insanity is found so by the court he must be committed to a state hospital. If after commitment, the accused is later adjudged sane it is then the duty of the superintendent of the state institution to which he has been committed to notify authorities far enough in advance of the subject's release to permit bringing him to trial on the charge originally brought against him, Bettman pointed out.

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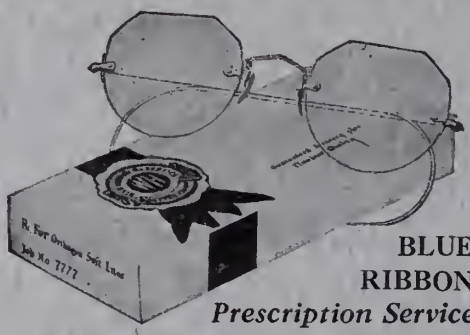
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SEPTEMBER 1, 1930 VOLUME XXVI Number - - 9

"The true rate of advance in medicine is not to be tested by the work of single men, but by the practical capacity of the mass."

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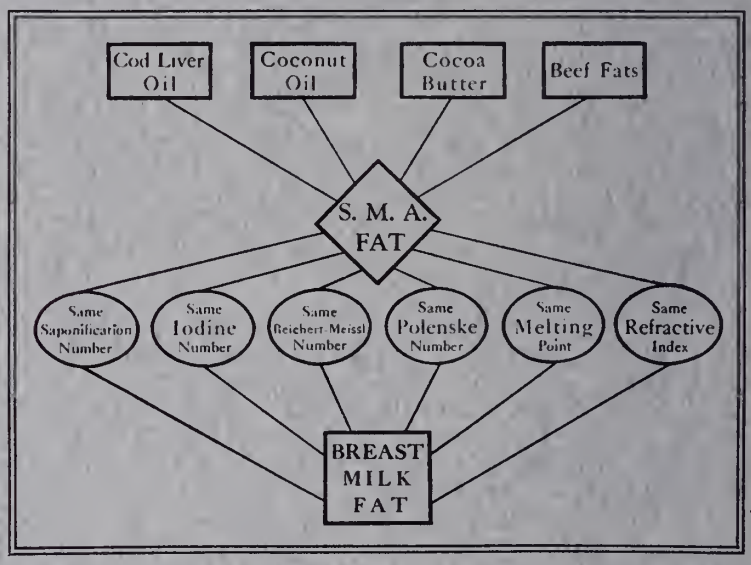
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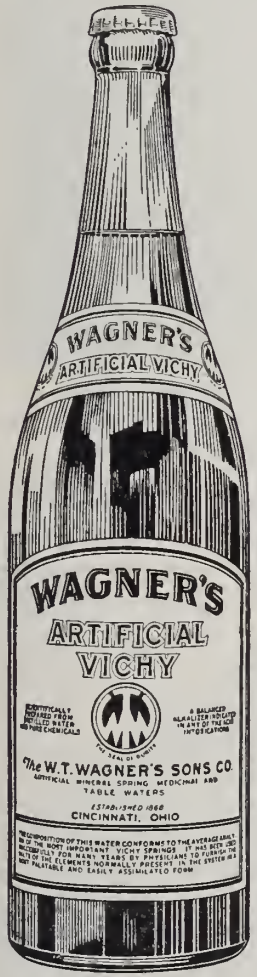
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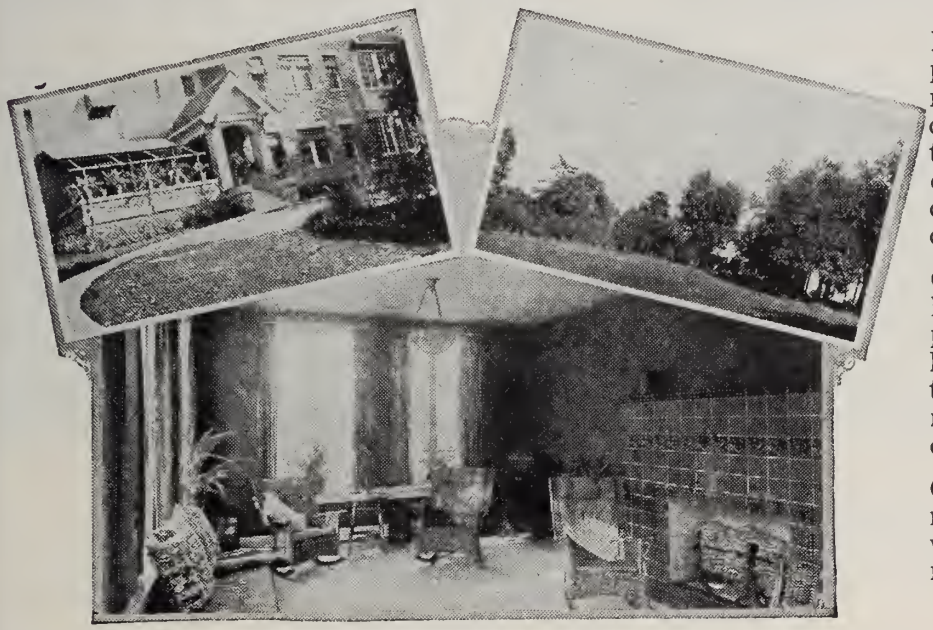
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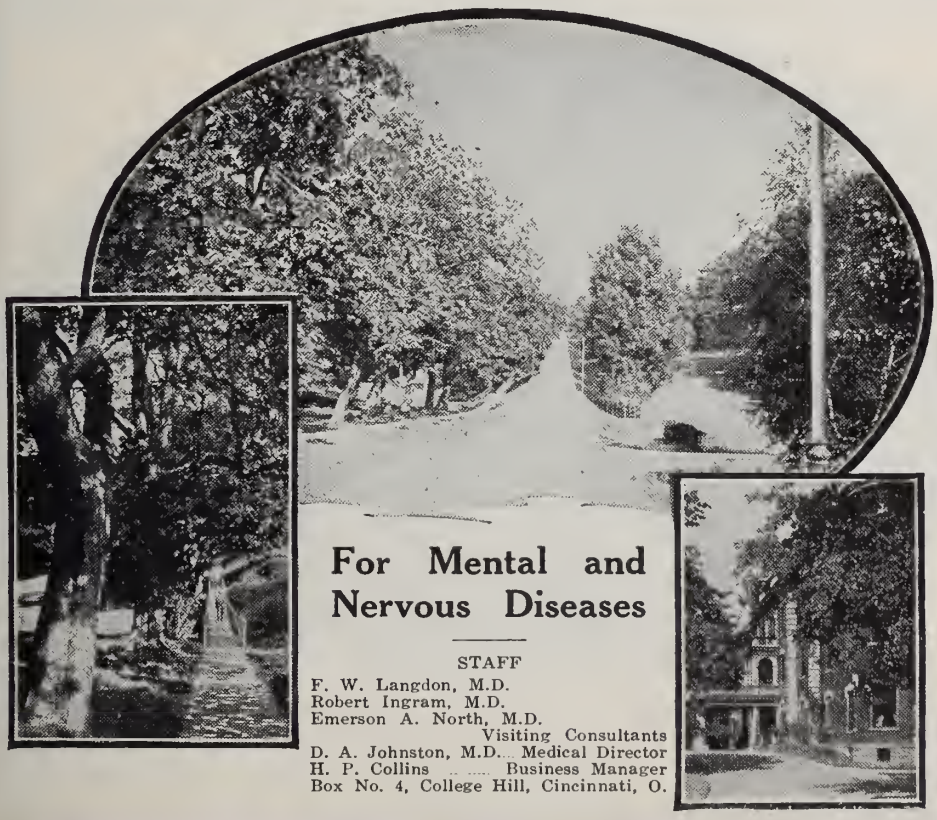
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Mental cases and drug addicts not admitted.

Located high on the edge of Washington, thirty miles south of Pittsburgh.



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A quarter century of experience

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The Five Acre Stokes Estate on Cherokee Road, Louisville, Ky.

Alcoholic treatment destroys the craving for alcohol, restores the appetite and sleep, and builds the patient up physically and mentally; whiskey withdrawn gradually; not limited to one pint of whiskey in ten days.—Nervous patients are accepted by us for observation and diagnosis as well as treatment. Drug treatment is one of Gradual Reduction; it relieves the constipation, restores the appetite and sleep; withdrawal pains absent; no Hyoscine or Rapid withdrawal methods used unless patient desires same. Mild mental cases have every comfort that their own home affords. Physiotherapy—Clinical Laboratory—X-Ray—Consultants. (Telephone East 1488). Address.

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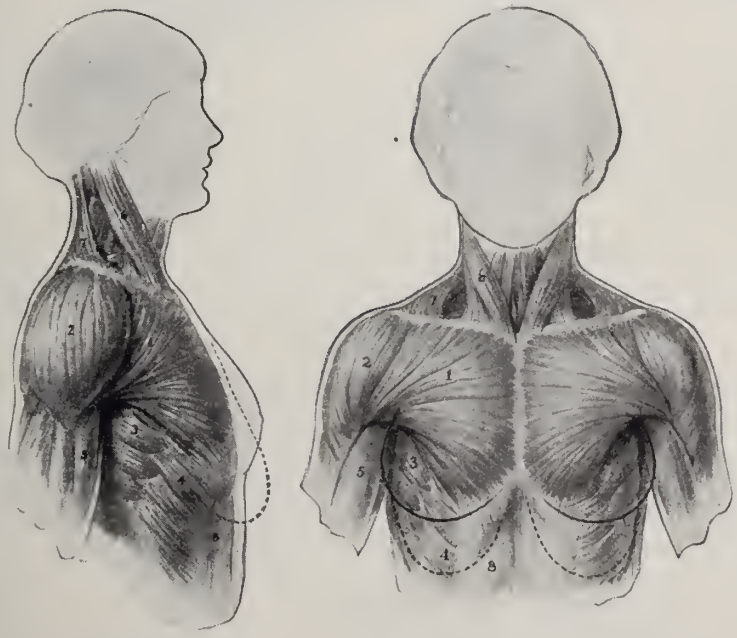
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for the Practitioner



Lateral View Anterior View

MUSCLES OF THE FEMALE THORAX

(Solid lines indicate the normal breast, dotted lines the sagging or pendant breast.

1—Pectoralis major. 2—Deltoid. 3—Serratus anterior. 4—Obliquus externus abdominis. 5—Biceps. 6—Sternomastoid. 7—Trapezius. 8—Rectus abdominis.

Sets of Anatomical Studies furnished to physicians upon request.

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Physiological Supports Scientifically Designed

S. H. CAMP & COMPANY
Manufacturers
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make Nourishing Foods *taste better with this*



THIS is one of the advertisements of The Sugar Institute, appearing in newspapers throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States.

New Seasoning

THE OLD PROVERB SAYS, "Hunger is a good sauce." But what is to be done when there is no appetite or hunger for the foods we should eat?

There is no seasoning more unusual than a combination of sugar and salt in giving familiar foods a new and appetizing flavor. Just taste a pinch of salt and a dash of sugar mixed together and you'll realize what a full-bodied goodness they make.

Then, try such a mixture of salt and sugar in cooking vegetables. In peas, tomatoes, carrots, spinach and cabbage, a level teaspoonful is enough, but suit your taste. Put it in soups, stews, or cereals as they cook. You'll be surprised to learn that the sugar not only blends deliciously with the flavor of the dish, but emphasizes it.

The most popular mixture to use and keep on hand is equal parts of sugar and salt. You may prefer one part sugar with two parts salt.

Doctors and dieticians recommend the use of sugar as a flavor. Not only does the sugar promote the necessary flow of gastric juices but it is quickly converted into energy. The Sugar Institute, 129 Front Street, New York.

"Good food promotes good health"

With infinite care . . .



A photograph of one of the Digalen manufacturing laboratories in the attractive new home of Roche . . . . . at Nutley, New Jersey . . . . . Where the ampuls are filled.

IN this immaculate dust-proof room the filling of Digalen Ampuls is carried out under rigid guard against contamination. Highly skilled workers only are selected for this exacting task. May we add that they have a thorough appreciation of the importance of the infinite care which should be exercised in the production of a life-saving drug . . . . . .

DIGALEN

is recognized as a digitalis preparation of signal value by cardiologists in every country and is in use in hospitals everywhere; for clinical results have demonstrated that Digalen insures prompt action whenever the heart can respond to digitalis. . . . . .

PACKAGES:
Vials, 15 cc.; ampuls 1.1 cc., cartons of 6 and 12, special cartons of 100 for hospital use; oral tablets (=½cc liquid), vials of 25; hypodermic tablets (=1 cc. liquid), tubes of 15 . . . .

Carry Digalen Ampuls in your bag
COUNCIL ACCEPTED

Hoffmann-La Roche, Inc.
Makers of Medicines of Rare Quality
NUTLEY NEW JERSEY

A complimentary trial vial of Digalen or a carton of ampuls will be sent physicians on request . . . . . .



Bridging the Gap

between "the man on the street" and the physician in his office

By means of the most dramatic and appealing "copy" that we can devise, aided by convincing, human-interest illustrations, the "see your doctor" message is being put before the general public in a way that has never been attempted before.

Facts which the public should know about some of the common but perplexing affections requiring a physician's skill for their treatment —conditions such as cancer, anemia, obesity, rheumatism—are the subjects of current advertisements which are appearing over the signature of Parke, Davis & Company in such magazines as the *Saturday Evening Post*, the *Literary Digest*, *Hygeia*, *Time*, and *Collier's*.

By publishing authentic, non-technical information about such diseases, and by proving how *intricate* these diseases are, we are endeavoring to show people *why* they should go to their doctor for consultation and treatment.

It is our sincere belief that this unique campaign of advertising, which has been running uninterruptedly for the past two years, is helping, in a measure, to bridge the gap between the man and the woman on the street and the physician in his office.

Copies of the full-page advertisements which are pictured above will be gladly sent you if you will drop a line to our Detroit laboratories.

PARKE, DAVIS & COMPANY

DETROIT, MICHIGAN

NEW YORK KANSAS CITY CHICAGO BALTIMORE NEW ORLEANS MINNEAPOLIS SEATTLE

In Canada: WALKERVILLE MONTREAL WINNIPEG

Patient Types . . .

The Rheumatic

Regular and adequate bowel elimination constitutes an essential part of treatment in the majority of patients suffering from the arthritic or gouty diathesis.

The comfortable action of Petrolagar is to be preferred to drastic physic. Petrolagar is pleasing to take and mechanically restores peristalsis without causing irritation and does not upset digestion.

Petrolagar, a palatable emulsion of 65% (by volume) pure mineral oil emulsified with agar-agar, has many advantages over plain mineral oil. It mixes easily with bowel content, supplying unabsorbable moisture with less tendency to leakage. It does not interfere with digestion.

Petrolagar



Petrolagar Laboratories, Inc.,
536 Lake Shore Drive,
Chicago, Ill. Dept. O. S. 9

Gentlemen:—Send me copy of "HABIT TIME" (of bowel movement) and specimens of Petrolagar.

Dr.....

Address.....

.....

GASTRON

The Entire Soluble Constituents of the fresh gastric mucosa, including the pyloric

The amino acids, colloidal proteins, known activated enzymes, associated nitrogenous extractives, organic and inorganic cell principles—these are all contained in Gastron.

GASTRON is an aqueous-acid-glycerin extract, 0.25% HCl.

It is significant of the degree in which Gastron represents a gastric-gland concentrate that 1. C.C is capable of converting 200 grams of coagulated egg albumen under the official test; the high protein content is shown by the copious precipitate with strong alcohol, ammonium sulphate, etc.

GASTRON, the true stomach-gland extract, gland tissue juice of constantly increasing repute in symptoms and disturbances with attribution of gastric deficiency.

GASTRON is agreeable and stomachic.

Fairchild Bros. & Foster

NEW YORK

Makers of original products suggested by the progress of science in medicine.

PUBLIC HEALTH - SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

The increasing toll of automobile accidents in the country annually has created a new and puzzling problem for physicians and hospitals to struggle with.

Medical Losses From Auto Accidents

A large percentage of the bad accounts found on the books of doctors and hospitals—and they total millions of dollars—are those of victims of automobile accidents who have refused to pay or are unable to compensate for services rendered.

Economists have estimated that the cost of hospital care alone for highway accident cases in the United States during 1928 amounted to between fifteen and sixteen million dollars, and that the financial loss sustained by the institutions was between six and seven million dollars. Accident victims who are unable to pay or do not pay for services are carried on the hospital's books as "charity" patients, making an enormous drain on the resources of the institutions and creating a deficit which must be borne at least in part by pay patients.

Due to the situation, the Department of Institutions and Agencies in the state of New Jersey has been conducting a survey of the problem and some of the information uncovered is enlightening.

Nineteen general hospitals in New Jersey, studied in detail, show that they treated 1781 highway accident patients who spent 22,440 days in the hospital during 1928. The hospital bills rendered to these patients totaled $106,089, but of this amount only $59,150, or 56 per cent was collected. A majority of the hospitals studied do not expect to recover even a small portion of the $46,850 unpaid. The survey indicates that the total cost of hospital care of highway cases in New Jersey was somewhere between $600,000 and $650,000 last year, and that the financial loss to the hospitals amounted to between $250,000 and $300,000.

This study does not include physicians who treated the thousands of traffic accident victims, but it is safe to assume that almost every dollar lost by hospitals could be matched by a similar uncollected amount due attending physicians.

What is true in New Jersey, is undoubtedly true in Ohio, and because of the larger number of automobiles in this state, the annual losses necessarily must be greater.

That the problem is not limited to the United States is shown by the following letter from a British physician to the London *Daily Mail* and reprinted in the *American Medical Association Journal*:

"I am a physician with a considerable practice and I have had the misfortune to live close to a main road on which there is heavy motor-car traffic. In the last two or three years the number of accidents near my house has increased so much as to involve me in incessant work and heavy expenditure. I am called at all hours of the day, often when I should be on my rounds, to attend to victims. Sometimes they are brought to my house in a desperate condition. My appliances, my splints, my bandages are taken without any payment and are never returned. In the great majority of cases I can recover nothing. Three times while engaged in bandaging the injured in the midst of the crowd, which is apt to collect on such occasions, I have had my pocket picked. Repeatedly I have had small articles taken from my car. And I find that my experience is identical with that of many of my fellow physicians situated as I am. Can nothing be done to secure fair play for the physician? Or is he expected to lose his own practice and provide gratuitous attendance for everybody on the road, rich and poor?"

How to remedy the situation is not easily answered. Compulsory automobile liability insurance has been suggested by some but no practicable and workable system seems as yet to have been conceived.

Some states have attempted to meet the situation by giving the hospital the right of lien. The benefits derived from this plan are at the present time obscure.

Some form of protection for physicians and hospitals is long overdue. The question is one which deserves the careful study of authorities and agencies interested in traffic, transportation, safety and insurance problems, as well as members of the medical profession and hospital officials.

Addition and Subtraction—Not Substitution

About the time everybody settles down to enjoy some of the social and economic benefits which have been accumulated through years of sound, conservative, constructive and honest thinking and enterprise, along comes some genius of the "it's all bad" school of thought to wave the red flag and try to prove to his "dear readers" that America is tottering on the abyss of destruction.

The medical profession has been unfortunate enough to have had an unsolicited introduction to members of this fraternity of self-appointed world-savers who have spilled barrels of ink telling physicians and the public how physicians should adjust themselves to the changing social order.

The medical profession and sound, conservative business interests throughout the nation generally are fairly well agreed that they should steer clear of know-it-all peddlers of radical and socialistic ideas.

According to Merle Thorpe, editor of *Nation's Business* and considered as the unofficial spokesman for the United States Chamber of Commerce, his "favorite magazine" believes that it "is better to build toward an ideal industrial society by subtraction and addition than to fly to substitutions, most of which depend on a mythical, superhuman power called Government".

This pertinent remark and some other interesting observations on the same subject were made by Mr. Thorpe recently in an editorial entitled "Wooden Legs for Chigger Bites", in *Nation's Business*, the following paragraphs from which testify that he hasn't much use for calamity howlers.

"A reader inquires: 'Have you noted the investigation conducted by the successful English business man, Sir Ernest Benn? *The London Times* and its readers helped him. He found that 95 per cent of current writing on business economics, both in England and America, deals with schemes of radical reorganization of our present industrial system, *while few authors set out to describe, to understand, and to interpret it.*

" 'Furthermore, political and social doctors, in the fair name of economics, prescribe extravagant remedies for every ill the flesh is heir to.

" 'Result? New schemes to supplant the present capitalistic system, based on individualism, are pounded into our brains. The news columns give emphatic attention to the novel plan of Tom, the politician; Dick, the socialist; and Harry, the welfare worker. Their ideas are new, and the new is news. The more revolutionary, the greater the news value.'

"Many significant points came out. The investigation showed that in only a few of several hundred books on economics was found anything on the subject of 'losses'. Almost every author dealt with profits. Thousands there are who can tell us what should be done with profits. That's simple. Divide them up among the workmen, or among the customers, or give 'em to the state. Any socialist knows the answer to profits.

"But the present system has its losses. Any system must have its losses. Deficits in government operation of a business are losses. They may be disguised by bookkeeping or passed on to taxpayers. But losses there are. Some one must look them squarely in the face and find ways of meeting them. It will not do to say, 'Oh, let the losses take care of themselves'. Some one must pay for them. And the pay will come out of somebody's savings. 'Savings' is another word for 'profits'.

"Socialist and economic critics of business cry out, 'Production for use only and not for profit'. They, again, are afraid to face facts.

"Our correspondent continued, 'My favorite business literature interprets our economic life as it is. It does not hesitate to point out faults; it tries to get at their cause. Most important, exhorts business itself to correct them. It doesn't fall into the easy and lazy method of proposing legislative fiat.

" 'It discovers the novel and unusual in our business life, thus making its interpretation as readable and entertaining as the radical's news story. When it describes, for example, the varied activities of our banking system, it provides a story for headlines as exciting as the proposal of a congressman or reformer that the postal system take over the nation's job of banking. It finds adventure and romance in the assembling of food on the modern breakfast table.'

"Which leads us to consider *our* favorite magazine. It never turns a deaf ear to the new proposal, but it believes the best way to evaluate the new is to understand the present. It believes *it is better to build toward an ideal society by subtraction and addition than to fly to substitutions*, most of which depend on a mythical, superhuman power called government.

"It believes that it is foolish to start with the assumption, as most writers do, that all is bad. The patient may not need a major operation—the red spot on his shin may be only a chigger bite, not a case for a wooden leg.

"The need of the day is for economic statesmen, who have poise and patience, *not to upset but to make better what, after all, is not such a bad industrial system.*"

Interesting Controversy on Fees

Widespread publicity which has been given to the McCormick suit in California, involving among other things the fee paid to Dr. E. J. Kempf, has raised some interesting discussions among the medical profession and laity on the question of how much a doctor may charge and what bearing the ethics of the profession have on the question.

In commenting on the case, testimony of which revealed that Dr. Kempf had been engaged to give his exclusive personal attention to Stanley McCormick, for which services he was to receive the mutually agreed upon sum of $120,000 per year, a Columbus newspaper, editorially, made the following interesting analysis of the rather involved question:

"Many critics have alleged that such a charge is indefensible, no matter how agreeable the Mc-

Cormicks may be to its payment in this particular case or how great the curative talents of Dr. Kempf," the editorial states.

"Internationally known physicians and surgeons are frequently asked to give their services for nothing to needy poor, and they not uncommonly comply with gracious willingness. Having thus waived the limit at the lower end of the scale, can they be legitimately expected to recognize a fixed limit at the other end?

"Certainly the most excessive recorded fees of the greatest medical practitioners of our day are rather moderate compared with the fees charged by equally famous corporation lawyers to wealthy clients. Yet it requires much longer, more exacting and more expensive preparation to be a doctor today than it does to enter the legal profession. Further, saving a life is a more crucial matter than winning a suit.

"The public has no means of acquiring precise information as to how much Mr. McCormick has improved under Dr. Kempf's treatment. But as long as both the patient and his relatives appear satisfied we may safely assume that the doctor is doing all that can be done or that he pretended to be able to do."

As intimated in the editorial, the question of fees is after all a secondary factor in medical service. The great majority of physicians render just as sincere, honest and competent service to charity patients as they do to their wealthy clients. The financial return to the physician depends for the most part on the financial status of the patient and on the opinion of the patient regarding the benefits derived.

In the last analysis, the important and fundamental factor in medical service is not whether one man receives the treatment of a physician free; whether another receives the same treatment for a moderate fee, and another for an extremely large stipend. The primary objective of every physician is to render the best service he has at his command to all, regardless of economic and social standing, and base his remuneration on the accepted theory that each shall be charged in accordance with social and financial standards.

Public Opinion Thru Social Control

Two elements in the social and economic life of America were assailed recently by Dr. Edward H. Griggs, nationally known educator in an address before the Ohio Education Association annual meeting at Columbus.

"Two ugly inheritances" left to the United States from the World War are, according to Professor Griggs, first, "the strengthening of the federal government, well enough as a war time measure, but as a continued policy economically wasteful and destructive of democracy which is dependent on local initiative", and, second "*the practice of molding of public opinion by the use of the instrumentalities of social control, under which plan people are taught what to think, instead of how to think*".

Dr. Griggs' comments are especially applicable to the gradually broadening health-welfare field in which governmental agencies are engaged.

The growth of governmental control and direction in this field is quite obvious. Local initiative in many phases of this work has entirely disappeared. As a result, the public is becoming more and more to look to centralized governmental authority for action in matters which should be under the control of local officials.

Also, it is a recognized fact that the health welfare field is a fertile one for organized and commercialized propagandists. The public is supposed to accept without question the views and opinions expressed and to make no attempt to study the facts—if any—and draw its own conclusions as to their value.

This is one reason why the medical profession always has frowned on advertising by physicians. The profession believes in presenting facts based on authentic study and experiments, letting the public make up its own mind as to the beneficial qualities of the methods and discoveries.

As Dr. Holman Taylor of the *Texas State Medical Journal* points out, if advertisements lauding the different claims of the great variety of practitioners of medicine were displayed "the most plausible liar would get the greatest results".

Some propaganda in the field of health has done more harm than good. The fundamental problem is that of educating the public to look to authentic qualified and conservatice sources for its information on medical science and public health and, after it has the facts, how to analyze and apply them.

The "Health" Motif in Advertising

"The term 'health-giving' is the most overworked and most loosely applied expression in advertising", declared Dr. Paul B. Dunbar, assistant chief of the Food and Drug Administration of the U. S. Department of Agriculture, in a recent address before a joint convention of the National Canners' and National Wholesale Grocers' Associations.

Dr. Dunbar advised his listeners to eliminate from their labels of prepared foods anything that smacks of health claims and base the selling appeal on the good character, quality and the honest food value of the product.

A recent report of the U. S. Department of Commerce states that the amount spent for national advertising in general magazines during

1929 was $203,776,077 and that spent for radio advertising approximately $18,000,000. The report also points out that the amount spent by the drug and toilet goods industry in all kinds of advertising was approximately $38,000,000, while the food and food beverage industry spent around $27,000,000.

These figures are an indication of the enormous power which many industries of this nature have in the matter of public appeal and influence. They also indicate the enormity of the harm which might be done through fraudulent and improper exploiting of products, especially food and drug products.

It takes no expert to point out that the American public is verging on the point of obession on the question of "health" foods, "health" fads, "health" exercise, "health" hokum, etc. Over-stimulation of this health-consciousness is certain to result in a detrimental reaction. As Dr. Dunbar warned, it is up to the producers of foods, drugs, etc., to know where to draw the line.

There's Still Some Good in All the Bad

Despite the pessimistic growling of those who hold to the belief that the world is going to the bow-wows socially and economically, the editor of the *Bulletin of the Medical Society of the County of Kings, N. Y.*, refuses to be convinced, and he especially refuses to join those who are loud in their opinion that medicine is in a precarious state and on the verge of a collapse.

"As an aftermath of a State Society meeting and an American Medical Association meeting", he writes, "the world is convinced that everything is all wrong with medicine. The costs are too high, the rewards are too low, the specialist becomes wealthy in short order and the child of the generalist goes without shoes. Hospitals are too few, too large, too elaborate, too congested, too scattered, too crowded. Nurses are pretty, interesting, grasping, gougers—while all the cults are anathema or life-savers as your mood dictates.

"It is not a profitable hot weather occupation to sit down and cogitate about why medical men back-bite, why practitioners do not cooperate with one another. As a matter of fact the medical profession is not so bad. It does do its sincere bit of work every day and every hour.

"We know as physicians, the public knows as patients, and the world knows that never before has better medical service been available than right now in the summer of 1930. The medical man realizes that there is no short-cut; there is no panacea; there is no cure-all; there is no millenium in the immediate future. * *

"The present hot weather; the present depression need not contribute to the general confusion if everyone will pull together. This is, perhaps, too much to expect, yet we need not let the occasional lapses in team work sour us completely. When a health agency overlooked its promise to confer or to cooperate and when a practitioner forgets some of the niceties of courtesy or ethics and when the paternalism of government runs riot, it will help some to give thought to the good things that are being done."

A Viewpoint on Physicians

Knute Rockne, recognized as one of the most illustrious and resourceful of football coaches, is also reputed to be one of the keenest students of human nature.

Rockne, during his career as a supervisor of athletics, has come into contact with thousands of young men and has had an opportunity to size them up as to character and personality both on and off the athletic field. So his observations and philosophy are not only refreshing but carry considerable weight.

Not long ago in one of his syndicated columns, Rockne took occasion to trace the career of one of his former gridiron stars who had elected to enter medicine.

In concluding his article, the famous coach made a few observations concerning the medical profession generally which differ decidedly and wholesomely from the comments aired occasionally by those who claim to be authoritative critics of this, that and the other.

"No other profession is nearly so exacting", writes Mr. Rockne concerning the profession of medicine. "I have been wondering what makes young men want to go into the practice of medicine with all its grief, endless hours, long preparation and what-not. It has been my observation that the good doctors have a sort of spark in their eyes, whereas many other professions interest men from the standpoint of monetary reward, easy livelihood, soft berth, prestige, or a stepping stone to something else. This can never be said of medicine. Medicine apparently is all-absorbing and occupies all of a man's wakeful moments and even some of the others. I have tried to analyze some successful doctors and I find that all of them have personality, ability, honesty, capacity for work, a burning zeal toward perfection in his chosen specialty, and intense responsibility regarding the human lives he is taking care of."

Mr. Rockne has not only pictured the successful physician as he sees him, but he has also summarized the requirements for success in the practice of medicine. Unless the youngster with the ambition to become a good doctor can measure up to the high qualifications named by Mr. Rockne, he should seek other fields for his life's work.

Some Problems of Medical Service

W. C. RAPPLEYE, M.D., New Haven, Conn.

THERE seems to be general agreement that the greatest health problem in the country is that of securing an adequate distribution of modern medical services to the entire population at a reasonable cost. It is clear that our knowledge of the diagnosis, treatment and prevention of disease is far in advance of its application to the needs of the individual or the community. The largest problem before the medical profession at the moment is the closing of that gap which will make the application of our present knowledge both available and effective. My few remarks will be confined to a consideration of several of the factors concerned in the delivery of medical services.

There is no difficulty in demonstrating to the satisfaction of most people that physical and mental health are a nation's greatest asset. The prosperity and happiness of a people are largely dependent upon mental and physical vigor. The problem is to devise ways and means of insuring the conservation of health, not through temporary expedients but through some farsighted, permanent program which promises to become an essential part of that cooperative endeavor known as civilization.

Many suggestions have been put forward recently in an endeavor to solve this problem, some of which aim to provide a quick but temporary solution. It is quite apparent that some of these plans are governed more by emotion than by judgment and too frequently they are proposed by individuals unfamiliar with the fundamental nature of the problem. Any scheme dealing with public problems must be judged ultimately by the effects it has upon the individuals whom it is designed to help. If that is true, a plan of medical service must be judged from its effects upon those in need of medical advice and treatment and the quality of the services rendered. Because of the technical character of medical service, it is reasonable to insist that it shall be provided by those who have had a training which qualifies them to perform it. The essential feature of a competent and effective medical service is trained and informed personnel. Any plan, whether developed from within the profession or imposed upon it from without, that lessens the responsibility of the trained physician in the care and treatment of patients or denies him the rewards of individual effort and superior ability will, in the long run, be detrimental to the public welfare.

The efforts being made or proposed to solve the problem of medical services should be looked upon as a symptom that the public has become health conscious and is desirous of obtaining the benefits of present day knowledge regarding disease and its prevention, to which we, as a profession, should be responsive. A country which endeavors to regulate its industries and its railroads and to manage a scheme of compulsory and universal education is likely to make an effort to improve and conserve its greatest asset, the health of the people. Whether the scheme to be worked out will be sound or fallacious depends to a considerable extent upon the type of leadership in the program. If we are right in assuming that every individual in the community should receive the benefits of modern medical knowledge and that considerable numbers still do not receive such benefits, it is more than likely that efforts by amateurs, social uplifters, politicians and others will be made to correct that difficulty. But no matter how sincere these efforts are or how bad some of the defects in medical care may be, there are certain fundamental considerations which will determine the ultimate success of any plan.

There are several phases of the problem. One is economic and is concerned with the financial aspects of medical care and the provision and distribution of facilities required for an adequate service to a community. Another is that of professional organization which will provide a proper distribution of professional services to meet effectively the actual needs of the community. No plan of medical care can be fully successful without intelligent public opinion and cooperation based on confidence in those conducting the program. Still another feature is educational in character and deals with the recruitment and training of physicians, nurses, technicians and the other personnel essential to a health service and the educational program necessary to keep that personnel abreast of new knowledge and methods.

Most attention has been directed recently toward the economic aspects of this problem and efforts are being made to create the impression that the cost of medical care is unreasonably high. All of you are familiar with the fact that at all times an average of two per cent of the population is incapacitated and about twice that percentage are impaired and handicapped. The financial loss to the country represented by lost earning power and reduced production totals well over two billions of dollars a year, equivalent to one-half the cost of maintaining the national government. The economic features associated with preventable and premature deaths represents a very large loss, on which we need not speculate at the moment.

Read before the Fourth General Session, Ohio State Medical Association, at its 84th Annual Meeting, Columbus, May 13-15, 1930.

Director of Study, Commission on Medical Education, New Haven, Conn.

The direct cost of medical care can be estimated fairly accurately:

	In Millions of Dollars	Per Family
Patent Medicines and Drugs	700	$25.00
Physicians	650	24.00
Hospitals (civil)	380	15.00
Nursing (all forms)	200	8.00
Dentists	150	6.00
Non-medical practitioners	50	2.00
Total	2,130	$80.00

The direct expenditures represent a little over 2 per cent of our national income. That the figure of an average expenditure of about $80 per year per family for all forms of non-governmental medical care is reasonably accurate is indicated by the studies of different population groups in the country which have shown that the average amount spent by families of wage earners is about $60 per year, that for farmers is about $62 and for office employees about $80 per family. If the expenditures for governmental medical expenditures of all kinds, largely derived from taxation, are considered, the figure reaches about three billions of dollars.

The total expenditures are obviously great but they are significant only when compared with other items of our national expenditures and with the capitalized value which they aim to protect. A few illustrations of our national expenditures follow:

	In Millions of Dollars	Per Family
Passenger Automobiles	4,000	$150.00
Tobacco	1,800	67.00
Candy	1,000	37.00
Gasoline (non-commercial)	1,000	37.00
Movies, entertainment	930	35.00
Soft drinks, ice cream, gum	910	34.00
Jewelry and furs	780	29.00
Radios and musical instruments	440	16.00
Sporting goods, toys, games	430	16.00
Perfumes, cosmetics, toilet soap	410	15.00
Total	11,700	$436.00

These expenditures total about five and a half times the total cost of all non-governmental health services. The amount spent for tobacco is almost three times as much as that for physicians. We spend a great deal more for candy than we do for doctors. Our expenditures for entertainment are twice those for the maintenance of all civil hospitals. We spend twice as much for perfumes, cosmetics and toilet soap as we do for nursing. The explanation of that situation is not difficult to find for the people of the country buy what they are taught to buy and $1,500,000,000 is spent each each in that education by means of advertising. The country spends $3,000,000,000 a year in maintaining prisons, police courts and other machinery for the prosecution and prevention of crime but in spite of that the value of goods stolen each year equals the sum spent.

It has been estimated conservatively that the vital or human value of the American people, if one wishes to express its monetary value, is about five times the material wealth of the country. The latter is over 300 billions of dollars, which means that the expenditures for all forms of medical services is about 0.2 of one per cent of the human value. That is not a large amount to spend for protection and the intangible benefits received. In fact, there is every reason to believe that the present expenditures for medical care may be insufficient to guarantee an adequate service. Certainly they are reasonable.

These figures are presented only to indicate the relative expenditures for medical services and to suggest that the economic features of medical care should not be difficult to solve if we can but provide a plan which will insure a complete service to the population and convince the public that proper medical services are purchaseable and well within our financial means, although it may be necessary to curtail somewhat on expenditures for non-essentials. The fact that the cost of medical care is not overwhelming, however, does not relieve the medical profession of its responsibility for working out a satisfactory and more universal plan of medical services.

Totals and averages do not give a correct picture of the problem of illness and incapacity owing to the great unevenness in their distribution and the fact that they are usually associated with temporary or permanent loss of income. It is possible, however, to predict with reasonable accuracy the probable amounts of illness and incapacity in a unit of population and that fact has formed the basis of various plans to distribute the economic risk involved in sickness and disability. It is the well recognized principle of insurance which has been advocated and is now in force in most of the leading countries of the world. It is not my purpose to enter into a detailed discussion of this feature of medical services beyond calling attention to the fact that most plans of insurance in other countries have endeavored to include not only the economic risks of illness but a considerable number of other hazards associated with unemployment, risks of occupational origin and a wide range of non-occupational risks such as maternity, disablement, old age and death. Because sickness insurance has been submerged in the larger scheme of insurance, there has developed a wide range of undesirable features which have vitiated to a considerable extent the desirable benefits both to the public and the profession of a plan which aims to provide medical care to the entire population at a reasonable cost and to stabilize the economic position of physicians.

As most of you probably know, the original plan of sickness insurance was designed to provide cash benefits to replace wages lost during illness and incapacity. The primary purpose was to provide compensation to the wage earner. Later the purpose of insurance was shifted to provide medical, hospital and other forms of

treatment which aimed to restore the individual to earning capacity. The new emphasis is upon cure and restoration rather than compensation.

Collective protection against sickness was first formulated in the French Convention of 1794. A great number of organizations have sprung up to provide collective protection of which occupational and interoccupational funds, assurance societies, friendly societies, trade union benefit associations, territorial funds and other forms of mutual benefit societies may be mentioned. The first country to adopt national compulsory insurance was Germany (1884). At present, twenty-three countries have adopted the principle of compulsion.

Another feature of the problem is the source of financial support which may be outlined briefly:

1. Public funds alone (Portugal)
2. Employees and employers (Germany)
3. Employees, employers and state (Great Britain)
4. Employers alone (Russia)
5. Employees alone (none).

It is clear that many of these schemes are a combination of indirect taxation, compulsory savings, state subsidy and philanthropy, the last as represented by the voluntary hospitals of Great Britain which make a large contribution to the care of the sick.

Time will not permit a discussion of the merits and defects of the insurance plans* developed in the various countries or to contrast the plans of compulsory insurance as practiced in Germany and England, as illustrations, with the so-called voluntary plan as used in Denmark. It does not follow for one moment that national insurance on a compulsory or voluntary basis is the only method of dealing with this matter. There are many who believe that it is possible to avoid the serious defects of national insurance by the development of other schemes which will retain the advantages and strong features of individual and voluntary effort as contrasted with the regimentation and standardization of patients and doctors, the level of mediocrity and loss of personal responsibility and initiative which such procedures aim to secure and the political and financial implications that are so likely to follow any universal governmental plan.

All of us are aware of defects in the methods of medical practice in this country but there are fundamental advantages in the American scheme which need to be capitalized and made more widely available, which a governmentally regulated medical service is likely to destroy. The problem we have is not the destruction of our present system and the substitution of a paternalistic scheme ill-adapted to the philosophy of American life, but rather the extension of the desirable features of our present scheme and the correction of its defects.

Let me merely refer to some of the elements in our plan of medical service that are moving in the direction of solving this question. The number of hospital beds in the United States has increased 127 per cent in the last twenty years (there are over 900,000 beds now). The capital valuation of hospitals in the country at present is about $4,100,000,000, an increase of 2500 per cent in twenty-five years. The number of patients hospitalized last year was about 12,000,000, compared with 1,400,000 in 1904. Fifty-eight per cent of the counties in the United States now have general hospitals, compared with 44 per cent in 1920. The number of clinics is now over six thousand in contrast with only about one hundred fifty in 1900. Only about 50 per cent of patients hospitalized in general hospitals pay a doctor's fee. Very few patients in governmental hospitals pay professional fees so that not more than one-quarter of hospitalized patients actually pay professional fees. Visiting and public health nursing, school nursing, the care of well babies, prenatal clinics, etc., only indicate other efforts to provide medical care. Many industries are establishing comprehensive medical services, some on a local insurance basis. There is every indication that this activity is likely to increase and there is ground for believing that "establishment" insurance by individual industries, of which there are now many examples, may be the direction in which the efforts in this country will move, although it is clearly recognized that this plan reaches only a small proportion of the total population as yet. Another feature that needs only to be mentioned is the tremendous growth in various schemes of voluntary taxation commonly designed by the term "community chest". Over 350 cities now have community chests and last year more than $50,000,000 was raised by them for various forms of social and medical relief.

It is not necessary to discuss the tremendous expansion in our ideas of what constitutes adequate medical care in the light of present day knowledge. It has been inevitable that the cost of medical care should rise. But the increment of increase in the cost of medical services since the beginning of the century is small compared to the increase in expenditures in many other fields. Let me only call your attention to the fact that the national income of this country has increased from 31 billions of dollars in 1910 to 89 billions in 1928. It is very doubtful if provisions for medical and health work have received an undue proportion of that increase, when it is recalled that medical knowledge has been increasing at a phenomenal rate and that the largest part of the increase in the cost of medical care arises out of that new knowledge and the new methods based on it. Mention need only be made of the growth

*See Report of Commission on Medical Education on "Medical Education and Related Problems in Europe", April, 1930.

of hospitals, laboratories, nursing, *X*-ray work, dentistry, physical therapy and specialization to suggest elements in this greater cost which arise from the great increases in the knowledge required for proper diagnosis and treatment.

Allowing for the inevitable increases in the cost of proper medical care, there are, however, a number of unnecessary costs which can be corrected. It is important in discussing necessary versus unnecessary services to have rather clearly in mind a standard of adequacy, but it is evident that such a standard is not a rigid mechanical device but an intelligent approach to the problem of each individual patient which is not likely at any time to render itself to standardization or external valuation. Studies made by various bodies in this country and abroad seem to indicate very clearly that about 85 per cent of illnesses are in six groups of disorders. If one adds health counsel and advice as an essential part of a basic medical service, 90 per cent of the medical services for the community can be dealt with adequately by a well trained physician. Not much more than 10 per cent of illnesses require a consultant, advanced laboratory determinations or treatment by specialists, but there is, of course, a very definite proportion of illnesses that ought to be referred by the practitioner to institutions or physicians who are competent to deal with the specific problem of the given patient.

What we need is a clearer conception of the differential needs of patients and a willingness on the part of the public to pay for the basic medical service which is often far more important and valuable than the services of a specialist, particularly in matters of early diagnosis, treatment and prevention which, however, are less obvious. It seems apparent that a concentration of the medical profession and the public upon this basic medical service would be a fundamental readjustment which, in the long run, would be beneficial to the public and would lower the cost of care through prevention and early diagnosis and treatment of disabling illness.

Undoubtedly there is a great deal of unnecessary surgery being done in the country, no small part of which is being done by physicians who have had neither the training nor experience to qualify them to do the best type of surgery. Surgery by untrained physicians is costly in more ways than one. It is because of this situation that there is a growing belief that the medical profession, either through special licensure or the control of surgical practice in hospitals, will have to devise some scheme which will guarantee to the public that a physician who does surgery is, in fact, competent to do it. This has already been done in Denmark and Norway, for examples.

Another group of expenditures that are costly and sometimes unnecessary are *X*-ray examinations and other forms of laboratory determinations when they are not indicated. The tendency to use laboratories unnecessarily arises in part from the eagerness of physicians to render as complete a service as possible and to exclude the possibility of the beginnings of disease. Not infrequently these extra services are utilized because the physician does not recognize the limitations as well as the value of such examinations or to protect himself against overlooking a remote possibility of disease. This is partly due, also, to the type of medical training which is now in vogue which quite evidently confuses the multiple and detailed examinations of patients in teaching institutions for the purposes of investigation and teaching with the requirements of practice. To some extent laboratories, *X*-ray and other professional services are used frankly as producers of revenue and to create the impression on patients that they are always required for the best type of practice.

Another common difficulty is the practice of self-diagnosis and the self-selection of specialists by patients which leads to "shopping about" for medical care. This is partly the fault of the medical profession itself for it is not an uncommon experience for a patient to be referred to half a dozen different specialists for minor and obvious complaints. The public is merely attempting to do its own selecting. The answer lies in each physician rendering a more comprehensive service to each patient and referring to specialists only those who actually require special examinations or treatment.

Still another element in the unnecessary cost of medical care is the custom of relatives insisting upon expensive accommodations in hospitals when they are not necessary for the actual care of the patient. No one raises any question about providing all items that are necessary for proper care. It is quite understandable and one can only sympathize with the anxiety and emotions of the family who insist upon the very best which the hospital can provide. Far too frequently, however, the relatives insist upon an expensive private room when they cannot afford such accommodations or the fees of physicians which are so frequently determined by the type of accommodation in the hospital. Families at the crisis of illness are governed by emotions rather than judgment and it is interesting to know that this situation was recognized formally as early as the fourth century when it was specified to district medical officers of Rome that "where there is a question of fees, the medical officer must take as a standard not what men fearing death will promise but what men recovered from illness will offer".

One of the criticisms of medical practice frequently heard is the exorbitant charges occasionally made by physicians. While such instances are likely to be widely known, in reality they are not common and usually arise out of some misunderstanding. Occasionally they are made

against patients who object to paying high medical fees but who are quite willing to spend freely in other directions.

It is well recognized that certain features of individualized practice of medicine are expensive. The economic use of the time of the doctor in office practice or in making domiciliary visits is difficult. Another feature of individualized practice is the overhead expense of maintaining an individual office, which frequently is from 25 to 35 per cent of the gross income of the doctor. Group practice and the concentration of offices in a single building or hospital tends to correct this difficulty and to make the work of a physician more effective.

It must be kept in mind, however, that the actual income of physicians is not high when one considers the investment in time and money in a medical training, the economic risks and uncertainties of practice and the direct elements of cost in providing an adequate medical service.

No discussion of medical economics can ignore the problem of the distribution of physicians in rural communities. May I mention only two general features of this question. During the last sixty years, the number of gainfully employed persons in this country who were in agricultural pursuits has dropped from 47 per cent to 18 per cent. The contributions of agriculture to the national income has also dropped from 26 per cent to 9 per cent. Not only is the drop in gainfully employed and in contributions to the national income of significance but it should be noted that whereas 18 per cent of those gainfully employed are still in agriculture they produce only 9 per cent of the national income. Physicians in a system of free competition are bound to react to the shift in economic status of rural communities and that is probably the largest factor in the uneven distribution of physicians. This problem is not unique in this country, for every nation has had the same question. In Sweden and in Scotland, the problem has been met by providing medical care in the sparsely settled areas through direct state subsidy. Good roads, the telephone and the automobile have done much to meet the problem in this country for most areas near urban communities, particularly for those in the rural districts who are able to pay for the services from a distance or able to go to the towns and cities for care. Rural hospital centers, home nursing services and other devices are moving slowly in the direction of solving this situation. A satisfactory solution will be found if we do not resort to methods that are too artificial.

All of you are familiar with the suggestions made from time to time to solve the distribution of physicians by providing a short medical course for those who will practice in the country. No one suggests how we would force the less well trained physicians into the rural sections, however, and it may be well to refer to the fact that this suggestion was tried in Europe and has been almost forgotten. Germany recognized two grades of physicians but discontinued that recognition in 1852. The Apothecaries' Act of Great Britain in 1815 established a substandard medical practitioner but the Medical Act of 1858 discontinued that recognition. The "Wundärzte" in Austria were given a two year training until 1810 when the course was made three years in length. Abolition of this training was proposed in 1848 but it was not accomplished until 1872. In The Netherlands, physicians trained for country practice were not permitted to enter the cities to practice but in 1860 recognition of that group was discontinued.

I have attempted in this discussion to bring into relief a few of the problems of medical service without advocating or suggesting any single solution for the good reason that there is not likely to be a single solution. We are moving in the direction of solving many of these problems by various means and it seems clear that there are certain general principles that might be emphasized.

One of the most important is that of the prevention of disease, for everyone is in agreement that a very considerable part of illness and disability is preventable. We must do all we can to shift the vested interest of the medical profession from ill health to good health. The physician must become a health trainer and adviser as well as a healer. It seems quite clear that the development of a sound basic medical service must include provision for the practice of preventive medicine as an integral part of general practice.

A second important emphasis should be placed upon the basic medical service which should be provided for the entire community, not alone for the small proportion which is under treatment. Between 80 and 90 per cent of medical needs can be met by an adequately trained physician. The other needs should be provided by referring patients who need such services to specialists and experts which can only be done intelligently by physicians and not on the basis of self-selection by patients.

A third suggestion is in the organization of the profession itself. Specialism is an essential part of moderate medical service but it is the responsibility of the medical profession to guarantee to the public that those who claim to be specialists are, in fact, experts in their field. Mention has already been made of the possibility of special recognition for those who have had a proper training in their respective fields.

A fourth and very important feature is to provide ways and means of continuing the education of physicians in practice. This applies to the general practitioners and to the specialists, to the end that every physician shall be familiar with the possibilities, value and limitations of methods of diagnosis and treatment in order that he may

intelligently advise patients for those problems with which he cannot deal. Probably the most important factor in the medical care of the population is keeping physicians abreast of current knowledge. The social, economic and educational features of any program designed to infuse the entire profession with new discoveries and the application of new methods challenge the most thoughtful consideration of medical educators and practitioners. Knowledge is not distributable in packages like other commodities and is safe only in the hands of those who are trained to use it.

the student psychologically to practice medicine. We do a great deal in medical training to unfit the student psychologically, to practice medicine. Medical education has, in recent years, become more isolated from both general education and the medical needs of practice. We must come to look upon the medical student, the intern, the general practitioner and the specialist as different phases in the training of personnel to meet the medical needs of the community. We have been far too much concerned in tinkering with the curriculum than we have in developing medical education along sound lines.

Significant changes are being made in medical education now which need not be dealt with here. The effort to familiarize the student even superficially with every phase of medical knowledge has been abandoned, partly because it is a hopeless and unnecessary undertaking. The new emphasis is upon the learning of methods and the establishment of sound habits of study which will develop in the individual a permanent intellectual equipment which will allow him to continue his self-education throughout his professional life. The content of the basic course, of which the internship should be considered only a part, is being modified to present the problems of health and disease in their larger and interdependent relationships to psychology, emotional life, environment, habits of work, exercise, diet and recreation and the other factors which enter into the behavior and reaction of the human organism rather than as merely the mechanics of disease processes and technical procedures. Emphasis is being directed to the care, treatment and conservation of the mental, emotional and physical health of the patient as a whole not alone to the diagnosis and treatment of the physical ailment of one part of his physical machine. The technical procedures of special treatment which require long experience and special training if they are to be done properly should be delegated to postgraduate education.

Still another factor in this large problem deals with the facilities for practice. Modern medical practice is coming to be more and more built about hospitals, laboratories, nursing, group responsibility and other features which have a tendency to require facilities and various forms of non-medical personnel in the way of dietitians, technicians, physical therapists, nurses and others. At present there is a large increase in the development of these various partial services and one of the important needs is a better organization and correlation of existing activities in order to overcome the undesirable features of competition, duplication of effort, confusion and waste. The institutional features should not control or dominate but should be used to supplement medical services.

The growth of industrial medicine and discussion of the possibilities of some form of sickness insurance in this country require that all those interested in medical care shall keep clearly in mind that the most important factor in a sound medical service is the quality of medical care, not the scheme of organization or the method of financing. There are features of finance, problems of organization and interests of the public in this problem of medical care but the essential character of it is professional and technical. The quality, interpretation and correlation of scientific knowledge depend upon trained personnel who know the significance of that knowledge and how to use it.

There are two outstanding trends of our age, the democratic and the scientific. The hope of democracy depends upon leadership. We look for such leadership in law, education, business and banking and there is no reason why the public should not expect it of medicine. We possess the knowledge and personnel to solve a large national problem and possessing that knowledge, we are responsible for working out a satisfactory solution. We cannot hope to enjoy the leadership to which we are rightly entitled in modern society by constant opposition to proposals intended to deal with medical problems, even when those proposals are vague and obviously unsatisfactory or when proposed by those unfamiliar with the essential character of the problem. What we need is a constructive and sustained program directed and supported by the best brains of the medical profession which will aim to provide, control and retain leadership in health matters and in the program of medical services through proper organization of the profession, sound schemes of medical and postgraduate education and wise constructive public policy and publicity. That is the challenge to the organized medical profession in this country which can only be met by wise, far-seeing, unselfish, constructive leadership.

The Basis of Epilepsy. By Edward A. Tracy, M.D. (Harvard). Director of Epileptic Clinic at Forsyth Dental Infirmary, Boston. Illustrated. Richard G. Badger, Publisher, Boston.

Merck's Index, an Encyclopedia of Drugs and Chemicals. Fourth edition. An encyclopedia for the chemist, pharmacist, and physician. Published by Merck and Co., Inc., Rahway, N. J.

The Incidence and Mortality of Intestinal Obstruction

EDWARD JAMES MCCORMICK, A.M., M.D., F.A.C.S., Toledo

"ILEUS should be suspected rather than diagnosed by clinical signs and symptoms, and the more general use of the flat *X*-ray plate will bring to the surgeon obstruction of the bowels in the early stage before the appearance of textbook symptoms, and the operator will not be hampered by the bad risk and moribund case. Therein lies the secret of decreased mortality in ileus".[1] I quote the final paragraph of my paper upon the subject of "Acute Ileus" read before this section at its last meeting. I am indeed grateful for the invitation which makes it possible for me to appear here today and present to you statistics gathered from institutions in Michigan, Indiana and Ohio. These figures will bring before this Society the crying necessity of immediate attack upon a surgical problem whose gigantic toll in human lives has failed to impress us. A condition which, if the truth is known, reflects no credit upon our profession.

Sir William Taylor[2] speaks of the "inexcusable ignorance and carelessness of general practitioners, who see these cases early and treat them medically, thereby laying themselves open to actions at law for malpractice if not for manslaughter". This is a severe denunciation. It is true that many cases of intestinal obstruction stop for surgery on the way to the grave. It is also true that the highest mortality in all types of intestinal obstruction is in the post-operative variety under the very eyes and fingers of attending surgeons. Yet we attribute the high mortality in this disease to the failure of our diagnostic colleagues and if we subscribe to Sir William Taylor's thought, we, as surgeons, place ourselves in the position of "the pot that called the kettle black". I spoke last year of the utter hopelessness of procrastination in this condition. Moynihan[3] states that mortality over 10 per cent should be regarded as the "mortality of delay". I am convinced and shall prove to you that the actual mortality in this disease is conservatively 40 per cent and that it probably reaches 65 per cent. The surgeon must shoulder his share of the responsibility equally with the practitioner and internist. Prophylaxis, early diagnosis and prompt surgical treatment will be emphasized in the course of my appeal. This presentation, however, is chiefly devoted to a consideration of mortality.

During the past few months I have sent a questionnaire to all hospitals of over one hundred beds in Michigan, Indiana and Ohio. I have requested the total number of abdominal operations, primary obstructions and mortality and post-operative obstructions and mortality for the years of 1926, 1927, 1928 and 1929. I have defined primary obstruction as the case coming to the hospital with obstruction from any cause. I have interpreted post-operative obstruction as ileus occurring after laparotomy and during convalescence. In addition, I asked the historian to note whether or not *X*-ray plates were used to make a diagnosis of obstruction and if the cases were classified as high or low obstruction. I am indebted to the personnel of those institutions who have cooperated in this effort. It must be said in passing, however, that there are many standardized institutions in Michigan, Indiana and Ohio whose records and record systems apparently render the classification of cases as to kind, number and their complications, an impossible or very difficult task. Those agencies which have undertaken the responsibility of placing in so-called "recognized institutions" proper records and history index systems have in a great percentage of cases only scratched the surface and there is much to be accomplished. This criticism is based on a study of the questionnaires and letters reecived from various hospitals. The response from private institutions has been very gratifying, not so, however, from county and city hospitals whose staffs are composed of gracious physicians but whose administrative functions are guarded by paid lay experts. These hospitals should be the first to respond to any humanitarian effort. The medical departments of the State universities have treated my attempt with every courtesy.

In bringing to this Association the results of this study, I have necessarily been forced to lay aside some reports which were sent to me. Some were incomplete. Some, apparently, do not recognize post-operative obstruction. Certain hospitals were unable to divide their obstruction cases as required. A few institutions could not give the number of deaths. Many historians admitted that their present record systems made the arrangement of such information an impossible task. I have included in this paper the reports of twenty-two institutions which were complete in all details and have excluded those reports which were incomplete in order that the results which I present to you may not be affected. It would be unfair to include reports giving the number of cases of ileus and mortality without also recording the number of laparatomies as this would raise the incidence percentage.

Thirty-eight hospitals made returns, slightly less than 40 per cent. The twenty-two reports which were considered acceptable record 61,401 abdominal operations for the years 1926, 1927,

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1928 and the first half of 1929. The total number of obstruction cases, primary and secondary, was 1189. The incidence of intestinal obstruction in this series, is therefore, 1.93 per cent. The total number of deaths, and it must be remembered that these include only institutional deaths, was 496, a mortality of 41.71 per cent. (Table No. 1).

TABLE NO. 1

Abdominal operations performed in twenty-two hospitals scattered throughout Indiana, Michigan and Ohio—1926, 1927, 1928, 1929	61,401
Total number of cases of bowel obstruction	1,189
Deaths from obstruction of bowels	486
Incidence	1.93%
Mortality	41.71%

This is probably a very conservative figure.

There were 861 cases of primary obstruction, that is, cases coming to the various hospitals with obstruction from any cause. The incidence of primary obstruction is 1.40 per cent. Of this number, 861 cases, 322 institutional deaths are on file, a mortality percentage of 37.39 per cent. (Table No. 2). There were 328 recognized cases of post-operative obstruction, the percentage of incidence being .53 per cent. One hundred and seventy-four deaths occurred, a mortality per cent of 53.04. (Table No. 3). These figures are

TABLE NO. 2

Total number of cases of primary bowel obstruction recorded by twenty-two hospitals for the years 1926, 1927, 1928, 1929	861
Institutional deaths from primary obstruction	322
61,401 abdominal cases recorded given an incidence per centage of	1.40%
Mortality rate	37.39%

Compare mortality rates of Tables 2 and 3.

TABLE NO. 3

Following 61,401 abdominal operations performed in twenty-two hospitals there are recorded 328 post-operative obstructions.	
The incidence per centage is	.53%
There were 174 deaths giving a mortality per cent of	53.04%

extremely conservative. I am convinced that the real mortality percentage is much higher. This estimation depends for its accuracy upon a number of individual surgeons, assistants and physicians. Errors in diagnosis have undoubtedly occurred. Some cases of obstruction, especially of post-operative type, have gone to their reward with sepsis, peritonitis or other diagnosis when ileus was really the mortal factor. There is considerable variation in the reports from different institutions and I can say absolutely that certain hospitals with well-known surgical teams and up-to-date statistical departments present higher mortality records than the final results in this study would indicate. A review of tables No. 4, No. 5, No. 6 and No. 7 is of interest. Table No. 4 presents a mortality of 34.5 per cent while Tables No. 5 and No. 7 give a mortality slightly in excess of 60 per cent. Table No. 6 shows 70 per cent loss of life from obstruction of the bowels. Let me again emphasize the fact that institutions with nationally recognized surgeons and medical men and complete record systems present the highest mortality. I conclude, therefore, that a mortality of 41.7 per cent as presented in this study is too low. I infer no dishonesty but suspect record room incompetency, poor histories and charts and careless diagnosis. C. Jeff Miller[1] in his excellent resume states, "It is manifestly unfair to compare statistics based upon different premises, or to weigh the results

TABLE NO. 4

Hospital No. 1

	1926	1927	1928	1929
No. Operations	1743	1858	2007	2210
Primary Obstructions	26	44	35	35
Deaths	5	12	11	8
Post-operative Obstructions	9	16	8	18
Deaths	5	5	7	13

Primary Obstruction 140 Deaths 36
Post-operative Obstruction 51 Deaths 36
Combined Mortality of 34.5 per cent.

Note high mortality reported in post-operative cases. The low mortality in primary cases, however, gives a very low combined mortality. Comparison of Table 4 with Tables 5, 6 and 7 is interesting and demonstrates the great difference in figures obtained from four institutions.

TABLE NO. 5

Hospital No. 2

	1926	1927	1928	1929
No. Operations	1222	1650	2100	1955
Primary Obstructions	22	17	25	11
Deaths	13	12	12	4
Post-operative Obstructions	2	5	7	10
Deaths	1	4	6	8

Primary Obstructions 75
Post-operative Obstructions 24
Combined mortality of 60.6 per cent.

TABLE NO. 6

Hospital No. 3 University Hospital

	1926	1927	1928	1929
No. Operations	198	253	438	381
No. Primary Obstructions	none	7	6	12
Deaths	none	5	5	10
Post-operative Obstructions	5	6	2	6
Deaths	3	1	2	5

Primary Obstructions 25 Deaths 20
Post-operative Obstructions 19 Deaths 11
Combined Mortality of 70.4 per cent.

TABLE NO. 7

Hospital No. 4 University Hospital

	1926	1927	1928	1929
No. Operations	1023	1090	1023	year not complete
Primary Obstructions	10	16	12	5
Deaths	4	10	8	3
Post-operative Obstructions	9	8	14	4
Deaths	5	5	10	2

Primary Obstructions 43 Deaths 25
Post-operative Obstructions 35 Deaths 22
Combined Mortality of 60.2 per cent.

of the composite work of a hospital, particularly a public hospital, against the individual results of an expert surgeon. I think it is safe to say, however, that the higher the mortality is, the more nearly accurate it is likely to be, and that a mortality of sixty per cent is more likely to be correct than a mortality of thirty per cent, or lower". In any event, an institutional mortality which reaches a conservative 53.04 per cent in post-operative ileus can be said to deserve serious contemplation from those who wield the "aseptic scalpel".

Thirteen of the twenty-two hospitals do not use flat plates for the diagnosis of acute obstruction. Nine hospitals use this method when requested. Almost 60 per cent, therefore, have not endeavored by this simple method to make an earlier diagnosis when dealing with a suspicious case and are depending entirely on clinical findings. This is not a new method and we cannot commend these institutions. No institution has reported the routine use of the flat *X*-ray plate. Few record rooms classify obstruction as to location and part of the alimentary canal involved.

What is the solution of the problem? To my mind, prophylaxis, early diagnosis and the rational surgical treatment of ileus should receive more consideration by all operators and by the surgical divisions of all hospitals.

Prophylaxis must play an important part in all types of obstruction. Surely there are a great number of primary obstructions entering our hospitals, the cause of which should have been diagnosed and properly treated long before acute obstruction supervened. We all see cases of femoral, inguinal, umbilical and ventral herniae, cancer, bands and adhesions which should have been operated days or months previously. Acute obstruction simply adds a severe dehydrating and toxic condition to an already serious physical state. In our operative work some of us, although skilled technically, have not the necessary respect for the visceral peritoneum. Rough handling of the abdominal contents is inexcusable and is probably a factor in post-operative obstruction.

Prolonged operations, radical measures where conservatism would meet the needs of the case, and too great confidence in our own technical ability undoubtedly contribute to the incidence of post-operative ileus, dynamic and adynamic. Careful peritonization and the use of rubber sponges are advised. Drainage tubes and drainage material are too frequently used and are causes of obstruction. While I have not always had the courage of my convictions regarding the use of drains, I am becoming more and more convinced that the institution of the abdominal drain is an over-worked procedure. We drain many cases without sufficient reason. Many cases of appendicitis should be operated before a drainage tube is a consideration, and so it is with other intraperitoneal diseases.

I cannot pass the subject of prophylaxis in its relation to ileus of the post-operative variety without a word about anesthesia. Anesthesia undoubtedly plays a part in the incidence and occurrence of post-operative obstruction. Relaxation is a necessary adjunct to good surgical technique. When visualization must be gained by main force and the bowels held back with great difficulty ileus in all its varieties is welcomed by the operator. I shall be interested to know the incidence of post-operative ileus in the practice of surgeons employing ether or spinal anesthesia in many operations. I feel that its occurrence will be less than in the practice of men using nitrous oxide.

When I speak of conservatism in surgery, I must remind you that a great percentage of post-operative obstructions occur in the lower right abdominal quadrant following operation for neglected pathology and in many cases where appendectomy is done as a routine procedure in operations undertaken for the relief of other conditions. The inference is obvious. Appendicitis should be operated early and the appendix left attached to the caecum in operations for other diseased conditions when the patient has already had sufficient surgery and when pathology in the appendix is a questionable entity. Familiarity breeds contempt and we are all inclined to underestimate the magnitude of many operative procedures. Prophylaxis is an important consideration in any discussion of the subject of ileus. True, we can eliminate many cases, but certainly not all. There is a certain percentage beyond human control from the standpoint of prevention. These are also the cases which are frequently fatal, as those resulting from mesenteric thrombosis and bowel torsion. Fortunately, the incidence is small as this series demonstrates and in this lies our surgical salvation. This fact probably explains why most of us are not impressed with the actual enormity of the mortality. Surgery would be in a bad way if other conditions within its domain gave the sufferer only a forty or fifty per cent chance of recovery. Figures prove that post-operative obstruction is probably the most serious complication to be faced by the abdominal surgeon. Many cases of acute ileus can be prevented.

Early diagnosis constituted the appeal of my previous paper on the subject[1]. Charles H. Mayo[6] observes, "Ileus is one of the most serious conditions that confront the medical attendant, since if it is not relieved death is inevitable. In order to lower the death rate in such conditions, much depends on early diagnosis, judgment and promptness of action—most patients are moribund or nearly so at the time procedures are undertaken for the relief of obstruction of the large bowel". This statement is not commendatory of the diagnostic ability of the medical profession. Ileus should be a consideration in any

patient, and particularly in the post-operative patient who complains of abdominal pain, nausea and vomiting. Obstipation and failure of flatus to pass complete the picture. Mere suspicion justifies the use of the flat *X*-ray plate. Delay is dangerous! Palliative treatment is mentioned only to be condemned. Fecal vomiting, visible peristalsis and rising pulse are likely the harbingers of physical dissolution. These cases must be operated early and before the appearance of the classical clinical picture. The flat *X*-ray plate is a distinct advance and if used routinely will antecede by hours the textbook description of obstruction. This means a lowering of the mortality rate. I have proved this to my own satisfaction on many occasions. It is amazing to learn that some of our outstanding American surgeons find no use for the *X*-ray in the diagnosis of ileus.

The treatment of this condition is purely surgical. The procedure must depend upon the type of obstruction, its location and the condition of the patient. Enterostomy and colostomy are important considerations and should not be neglected, as is the administration of copious quantities of saline solution. Glucose, insulin and transfusions are useful adjuncts. Gastric lavage before and after operation at sufficiently frequent intervals to keep the stomach contents clear is an essential part of the surgical treatment. Sodium chloride administration is no longer empiric but definitely indicated, and after operation blood chloride estimations should be made. Surgical treatment, however, should be early and if necessary of an exploratory nature. Let the "aseptic scalpel" aid in the diagnosis if there is doubt. A condition which levies such a mortality cannot be dealt with conservatively. Minutes are important! Charles H. Mayo[6] said in 1922, "In many years of active surgical work I have not seen death occur as the result of an unnecessary exploration. I have seen many patients saved and some die of disease, but many died solely because exploration was undertaken too late". I have adhered strictly to the dictum "that a lump in the breast is cancer until proved otherwise" and in addition to the pleas of "suspicion of ileus" rather than absolute diagnosis, I have no hesitancy in suggesting, in view of mortality figures, that pain in the abdomen is obstruction until proved otherwise. I feel that the pendulum in medicine has swung in the direction of a conservatism which is likely to be more dangerous to the life of the patient than radical measures. I have nothing but condemnation for institutions and individuals who look upon the surgeon as a plumber who is called and told what is wrong and to proceed with the repair. The "surgical mind", the "surgical attitude", the "surgical touch", and "surgical judgment", the latter either within or without the abdomen, are never acquired or never appreciated by any man regardless of scientific foundation, training and ability, unless he has several years of surgical apprenticeship. Early operation must be the slogan.

Twenty-two hospitals in three states offer, therefore, a mortality of 41.71 per cent in all cases of obstruction of bowels over a period of three and one-half years. A study of the statistics of several hospitals included in this report would tend to prove that these figures are conservative. (Tables No. 5, No. 6, No. 7). Cases admitted with some form of obstruction to these institutions resulted in an institutional death rate of 37.39 per cent. The mortality in post-operative obstruction is 53.04 per cent. Miller[4] states that the figures for all forms of obstruction actually range between 55 and 65 per cent. Miller's figures, to my mind, are correct. The low incidence of this condition undoubtedly saves us considerable embarrassment, and the comparative infrequency falsely fortifies our surgical morale. If all mortality over 10 per cent is the "mortality of delay", surgery has a fertile field for thought and action. The lowest possible estimation of mortality in this condition is much too high. Every opportunity should be utilized to bring these facts before the profession. Prophylaxis, early suspicion, the flat *X*-ray plate and prompt surgery, exploratory if necessary, will aid in the production of better results.

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BIBLIOGRAPHY

(1) McCormick, E. J., "Acute Ileus", Ohio State Medical Journal, February, 1930.
(2) Quoted by C. Jeff Miller, "A Study of Three Hundred Forty-three Surgical Cases of Intestinal Obstruction", Annals of Surgery, January, 1929, Page 92.
(3) Moynihan, G. B., "Abdominal Operations", Fourth Edition, Philadelphia and London, W. B. Sanders Company, 1926, Volume 2, Pages 128-169.
(4) C. Jeff Miler, "A Study of Three Hundred Forty-Three Surgical Cases of Intestinal Obstruction", Annals of Surgery, January, 1929, Page 104.
(5) McCormick, E. J., "Acute Ileus", Ohio State Medical Journal, February, 1930.
(6) Mayo, Charles, "The Cause and Relief of Acute Intestinal Obstruction", J.A.M.A., July 15, 1922, Volume 79, Pages 194-197.

DISCUSSION

G. W. KEIL, M.D., Columbus: At the Cleveland Meeting last year, I heard Dr. McCormick read a similar paper on intestinal obstruction. Since that time, at the Ohio Penitentiary Hospital, we have used the flat plate method for diagnosing intestinal obstruction, both before and after operation.

With spinal anesthesia, in about three hundred operations on the abdomen, on account of negative pressure, we have had only two intestinal obstructions, post-operative. Spinal anesthesia in itself often overcomes intestinal obstruction. These two cases were diagnosed by the flat plate (*X*-ray) method on account of stormy convalescence or continued temperature and distention of abdomen.

A possible suggestion is, when a patient dies of intestinal obstruction or undiagnosed condition, an *X*-ray plate can be used as well after death as before. A 14x17" plate only costs a dollar, and a greenback or two used at this time to take this photograph will give you the diagnosis and save you the embarrassment of telling the family the patient died of peritonitis or, you do not know what he died from, especially where the family refuses a postmortem examination or where it is inconvenient to get a postmortem.

The Thyroid in Pregnancy

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THAT the thyroid enlarges during normal pregnancy is a well established fact. It is now realized that the degree of enlargement is frequently modified by the locality in which the patient is living during her pregnancy and a period of from one to three years before it. In other words women living in localities in which goitre is endemic are more prone to have enlargement of the thyroid gland during pregnancy than those living elsewhere.

INCIDENCE OF GOITRE AMONG WOMEN

In the State of Ohio enlargement of the thyroid gland is noticed in a large percentage of its female population. As Marine has pointed out, this may develop as a congenital defect, or associated with adolescence or pregnancy. Olin found a goitre incidence of 42.2 per cent among 31,612 school children in four counties in Michigan. Hall made a survey of 1,253 women students at the University of Washington, and found enlarged thyroid in 31 per cent, the average age being nineteen years and three months. A study made a few years ago to ascertain the incidence of goitre among the high school girls in a suburb of Cleveland showed that 36 per cent of these girls had demonstrable enlargement of the gland. So we may assume that at least 30 per cent of the women of Ohio of child-bearing age have hypertrophy or hyperplasia of this organ.

METABOLISM IN PREGNANCY

Marine points out that during pregnancy body metabolism is increased, and as it is a major function of the thyroid to stimulate oxidation processes in the body, it is probable that the heightened metabolism of the thyroid at this time is a true work hypertrophy. This view, Marine says, is supported by the fact that supplying the iodine-containing hormone artificially, or even iodine from which the gland can elaborate its own hormone in increased amounts, prevents hypertrophy. Furthermore, the iodine content of the gland during hypertrophy is always reduced. In man the normal iodine content of the gland is about .2 per cent of the dried weight of the thyroid. When the iodine content falls to less than .1 per cent, then glandular hypertrophy occurs.

So-called work hypertrophy, as explained by Marine, is disputed by Sandiford and Wheeler who have shown that the rapid increase in the basal metabolic rate that occurs in the last three months of pregnancy is not due to an excess of thyroxin (iodine-containing hormone) in the tissues, but is caused by the increased mass of protoplastic tissue, i.e., the mother and foetus during pregnancy. As a matter of fact they demonstrate the same point, in that there is a greater demand for iodine, hence a deficiency is created. They have corroborated the findings of others, that at the end of pregnancy the metabolic rate may be normally from 20 to 25 per cent above the DuBois standard.

CLASSIFICATION

A simple classification of goitres is that of H. S. Plummer into: (1) Diffused colloid goitre of adolescence; (2) Adenomatous goitre without hyperthyroidism; (3) Adenomatous goitre with hyperthyroidism; (4) Exophthalmic goitre, (Graves' Disease).

Diffuse colloid goitre, as such, early becomes large, and usually disappears spontaneously during the third decade of life. Those found in later life are the adenomatous type, and show a tendence to a slowly progressive though intermittent enlargement throughout life. It is now recognized that a certain percentage of simple goitres become adenomatous, instead of always having been adenomatous as was previously understood.

HYPERTHYROIDISM IN PREGNANCY

Mussey, Plummer and Boothby of the Mayo Clinic made a report in 1926 on 7,288 cases of toxic adenomatae and exophthalmic goitres seen at the Mayo Clinic between 1916 and 1926, of whom 42 were pregnant. Conclusions drawn from the comparatively few cases of pregnancy complicated by hyperthyroidism seen at the Mayo Clinic are: (1) Pregnancy is rarely associated with the condition; (2) Therapeutic abortions are not necessary; (3) Pregnancy and foetal mortality is not affected by the presence of hyperthyroidism; (4) Pregnancy does not make the control of exophthalmic goitre or other toxic goitres any more difficult.

Clute and Daniels reported an incidence of pregnancy of .41 per cent in 3,678 cases of hyperthyroidism operated upon at the Lehey Clinic in Boston between 1914 and 1929. They emphasize the increase of metabolic rate must be over plus thirty to be considered more than should be ascribed to normal pregnancy. They state that the toxic condition is no cause for termination of the pregnancy; also the children are not abnormal, even though there has been a thyroidectomy performed during pregnancy.

Daly and Strouse made some interesting clinical observations on some patients studied by them in Chicago in 1925. They reviewed 25 cases of functional disturbance of the thyroid at about the middle of pregnancy, with physical findings of:

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(1) Enlarged thyroid; (2) Tachycardia; (3) Tremor; (4) Increased blood pressure. These patients were treated by the administration of 60 grains of bromides a day for a week. The symptoms of only three were relieved in that manner. The rest were given from 3 to 5 drops of compound tincture of iodine (Lugol's solution), with no other medication, diet, or change from the usual routine. All were relieved of their subjective symptoms often within 72 hours. In all but one, the blood pressure returned to normal level, the size of the thyroid diminished in 50 per cent, tremor disappeared in all, and two patients were completely relieved of persistent nausea and vomiting. They gave the Lugol's solution for a week, and would stop for one or two weeks, and then would continue the course. Their conclusions were that: (1) Pregnancy may produce a state of functional and physiologic overstrain of the gland, which presents a clinical picture of hyperthyroidism; (2) Administration of iodine will relieve this syndrome; (3) The possibility exists, that in this functional disturbance we may have a basis for the common nervous instability of the pregnant woman, and for some of the toxemias of pregnancy.

Falls, in 1929, reported three cases of hyperthyroidism occurring during pregnancy, all of whom responded to rest in bed and the administration of Lugol's solution. He emphasized the point that all patients with hyper-emesis gravidarum should be examined carefully for evidence of hyperthyroidism. (Two of the three had severe vomiting before Lugol's solution was given, and ceased after treatment).

Davis in Milwaukee had eight cases with toxic symptoms return out of 520 deliveries. This is a percentage of 1.5, and I believe that you will note that fully that many patients with thyroid enlargement will sooner or later develop toxic symptoms. Davis also noted the increase in metabolic rate in all the women with simple hypertrophy.

We have all seen many cases of simple goitre accompanying pregnancy, and frequently encounter women with toxic symptoms following pregnancy; less frequently we see adenomatous goitre or Graves' disease complicating pregnancy. I will now give you the case histories of two such patients who were observed in the Out-Patient Obstetrical Department of Maternity Hospital and Western Reserve University School of Medicine, and in the surgical department of Lakeside Hospital.

CASE I—*Adenomatous Goitre with Hyperthyroidism Complicating Pregnancy.* This patient was 43 years of age, who had had a goitre since the age of 13. She came into Lakeside Hospital because of a large mass on the left side of the neck, causing symptoms of compression and particularly for the reason that she was two months pregnant, and in previous pregnancy had had some difficulty at the time of labor. The patient had no signs or symptoms of exophthalmic goitre and no definite evidence of thyrotoxicosis other than enlarged thyroid and some nervousness. Pulse 120 on admission, no elevation of blood pressure. Metabolism on admission showed 22 per cent increase. This increase in metabolism might have been due to possible "Toxicadenoma", or to the fact that the patient was pregnant. It was interesting to note that while in the hospital she was given Lugol's solution and that her metabolism suddenly increased up to 40 per cent within the period of one week. This is the only case that has come under our observation of the surgical service at Lakeside Hospital since July, 1924, where there has been an increase in metabolism following the administration of Lugol's solution. Examination of the thyroid revealed no thrill or bruit, but a large mass on the left side displacing the trachia markedly to the right and causing some stenosis although there was no stridor. The vocal cords were normal. This patient was operated upon, following which, symptoms entirely disappeared, and the metabolic rate promptly diminished. and the patient went to full term pregnancy without further difficulty.

CASE II—*Exophthalmic Goitre with Pregnancy.* Patient, aged 24, married, with three children, was first seen in the Surgical Dispensary of Lakeside Hospital September 13, 1924. At that time she had a swelling on the left side of the neck of six months' duration, which was tender. There was no general adenitis, and a diagnosis of tuberculous glands of the neck was made. An *X*-ray treatment was given. One month later she returned and glands were smaller. However, she was losing weight, and there was a so-called "colloid goitre" noted. She was then given Syrup Ferriodide mm. 5 t.i.d. Two weeks later she was seen in the Medical Clinic complaining of shortness of breath, loss of weight, and a presumptive diagnosis of simple goitre was made. In another two weeks, November 11th, 1924, symptoms were exaggerated and the metabolic rate was plus 70 per cent. Iodine therapy was continued until March 5th, 1925, when the character of the treatment was changed to Lugol's solution, mm. 5 t.i.d. On December 29th, 1925, she was examined and was found to be three months pregnant, and two days later was admitted to Lakeside Hospital with the complaint of nervousness, palpitation, choking sensation, weakness, irritability and loss of weight. Upon admission metabolic rate was plus 53 per cent; within a week was reduced to 42 per cent with Lugol's solution, mm. 5 q.i.d. January 11th, 1926, her metabolic rate was plus 38 per cent. She was then discharged from the hospital and the Lugol's solution was continued until the middle of May. On May 31st, she was confined at City Hospital, and November 24th, 1926, had an increase of metabolic rate of only 1 per cent, with no complaint, pulse of 88, gaining weight, nursing baby. She had no treatment after the birth of her baby other than that she had used iodized salt. This case makes one consider the advisability of intensive medical treatment in all cases of toxic goitre, complicating pregnancy. Certainly this patient was greatly benefited by this method of procedure.

INCIDENCE OF GOITRE IN PREGNANT WOMEN

In a very exhaustive study of 937 pregnant women in Detroit in 1923-1924 Yoakum found an incidence of 60 per cent. He also found that 60 per cent of the babies born to women in this series who were not given goitre prophylaxis had evidence of thyroid enlargement at birth, suggesting that endemic goitre may have its origin in intrauterine life.

To our knowledge, no check has heretofore been made of the goitre incidence in pregnant women in Cleveland, and a summary of our findings will be of interest to you. We have just completed a survey in a group of 300 pregnant women from the Prenatal Dispensaries, and find that 155, or 52 per cent of these 300 women have appreciable enlargement of the thyroid. Sixty-eight of our patients with goitre were colored women, showing that no race line is drawn in the matter of goitre incidence in pregnancy.

Age of Patients	*Number*	*Percent*
15 to 20 years	46	29%
21 to 30 years	82	54%
31 to 40 years	22	14%
Over 40 years	5	3%
Total Number	155	

Fifty-one or 32.9 per cent of the patients were primiparae, the remainder being multiparae. The majority of patients were in the latter months of pregnancy, over 75 per cent being six months or more advanced. Some of the primiparae had barely palpable glands, and these were not included in the compilation. Thirteen of the primiparae who did not have thyroid enlargement had been in Cleveland less than three years. One multipara with goitre, aged 40 years, had had an adenoma removed by operation in 1924; it enlarged during her last pregnancy so as to cause pressure symptoms, and she had been hospitalized for six weeks prior to delivery because of the symptoms induced. Two other multiparae had exophthalmic goitre, and were operated upon in 1928 and 1929 respectively. The latter, now four months pregnant, still has a blood pressure of 164-74 as a result of the condition.

TREATMENT

The majority of observers in this field feel that prophylactic treatment, to be efficient, must be instituted fairly early in pregnancy, at least before the last three months of gestation.

Various types of treatments are suitable, viz: (1) Sodium Iodide in tablet or liquid form; (2) Iodized salt for table use may be sufficient, as advocated by Marine; (3) Milk chocolate wafers such as Iodostarine, or other similar products, is not objectionable to the patient; contains 10 mmg. of iodine, and one tablet taken twice a week is usually sufficient. It has the advantage of giving a definite amount of iodine to the patient whereas the use of iodized salt is variable and uncertain.

In view of the fact that 52 per cent of the women showed demonstrable enlargement of the thyroid gland, and as we know that some of these women will sooner or later develop symptoms of hyperthyroidism, I feel that it is high time that more adequate and systematic measures be taken along the lines of goitre prophylaxis in all pregnant women. The danger of too much enthusiasm in this connection is that it is possible that the administration of iodine in any considerable amounts to a patient with adenoma without hyperthyroidism may precipitate symptoms of the latter. Furthermore, cases which seem to be simple colloid goitres may be undergoing adenomatous change. It is usually considered that any woman above the age of 30, showing thyroid enlargement, probably has considerable adenomatous development.

CONCLUSIONS

(1) The thyroid gland enlarges during pregnancy with considerable increase in the basal metabolic rate.

(2) At least 30 per cent of Ohio women in the child-bearing age normally have thyroid enlargement.

(3) Over 50 per cent of our pregnant women show thyroid enlargement and some of these will sooner or later show symptoms of toxic goitre.

(4) Routine prophylactic treatment instituted early in pregnancy is recommended.

(5) Hyperthyroidism in the pregnant woman can be treated medically and surgically without danger to the foetus, and very seldom, if ever, is therapeutic abortion indicated because of this complication.

610 HANNA BUILDING.

REFERENCES

(1) Marine, D.—S. G. & O. Vol. 87:1004. Sept., 1917.
(2) Hall, D. C.—Northwest Med. Vol. 6:189. July, 1914.
(3) Olin, R. M.—J. A. M. A. 82:1328. 1924.
(4) Sandiford, I. and Wheeler, T.—J. Biol. Chem. 62: 329-352. Dec., 1924.
(5) Plummer, H. S.—Oxford Medicine. 3:839-873.
(6) Clute & Daniels—Am. J. M. Sc. 179:477. Apr., 1930.
(7) Daly & Strouse—J. A. M. A. 84:1799. June, 1925.
(8) Falls, F. H.—Northwest Med. 28:391. Sept., 1929.
(9) Davis, C. H.—J. A. M. A. Vol. 87:1004. 1926.
(10) Yoakum, W. A.—Am. J. Obst. & Gynec. 15:617. 1928.
(11) Falls, F. H.—Am. J. Obst. & Gynec. Vol. 17. 1929.
(12) Mussey, R. D. et al.—J. A. M. A. Vol. 87:1009. 1926.

BOOKS RECEIVED

Doctor and Patient. Papers on the Relationship of the Physician to Men and Institutions. By Francis Weld Peabody, M.D., Professor of Medicine, Harvard Medical School; Director of the Thorndyke Memorial Laboratory; Visiting Physician and Chief of the Fourth Medical Service, Boston City Hospital, 1921 to 1927. The Macmillan Company, New York.

Physical Diagnosis. By Richard C. Cabot, M.D., Professor of Clinical Medicine in Harvard University, formerly chief of the West Medical Service at the Massachusetts General Hospital. Tenth Edition. Revised and enlarged, with six plates and 279 figures in the text. William Wood and Company, New York.

Doctors and Specialists. A Medical Revue With a Prologue and a Good Many Scenes, and is dedicated to every doctor with a sense of humor—something a doctor must have to live at all. By Morris Fishbein, M.D., Editor of *The Journal*, American Medical Association, and *Hygeia*, The Health Magazine. With illustrations by Dan Layman. The Bobbs-Merrill Company, Publishers, Indianapolis, Indiana.

Some Considerations of Normal Child Mentality

E. A. NORTH, M.D., Cincinnati

FOR the past number of years we have heard and read much about mental hygiene which has to do with both the correction of abnormal mental health and the conservation of normal mental health. There has been a tendency perhaps to over-stress the importance of the correction of abnormal trends and not enough emphasis placed upon the conservation of the normal. During the last number of years it has been the main objective of medical science to conserve health and prevent disease. It may be somewhat presumptuous for me even to attempt to discuss normal child mentality, but it does seem fitting before attempting to understand the various complicated processes involved in an analysis of the abnormal, that we try at least to determine as nearly as we can the normal. Particularly is this true of the child, because it is of the child of today that is being evolved or developed the adult of tomorrow. Mental abnormality has been known from a very early date. Psychiatry has been recognized as a specialty of medicine over a number of years, but social psychiatry is of recent origin. It is perhaps more an art than it is a science. Because of its recent origin social psychiatry has not much more than made a beginning, much there is to be yet learned. Many mistakes have been and will be made. While yet young in experience social psychiatry, however, has proved quite conclusively that the environmental life of the child has much to do with the mental health of the adult and in many instances is the determining factor as to how well the individual will use that mentality, measured in terms of intelligence nature has given.

This paper will not consider the influences of poor physical health, such as deformities or organic changes that might very decidedly influence mental health, nor such mental states as seen in the feeble-minded, the psychopathic and defective child. In fact there is no criteria by which we can say what is normal mentally and what is abnormal. We see all gradations in peculiarities and it is difficult to say in many instances where the normal leaves off and the abnormal begins. We may see two children who show very different types of mentality as expressed in thought, character and conduct, yet both may be perfectly normal when considered with the knowledge of the social setting, educational advantages and disadvantages, types of training had, and the character of mentality as expressed by the group in which they live, grow and function.

Thus we may see one type of mental expression in the uncivilized child on the one hand and another type of mental expression in the civilized child on the other. Yet as long as either of these types of expression are found in the social setting demanding that type of mental expression, in order for the child to make proper adjustments and adaptations to his particular environment it should be considered both normal and desirable. If, however, the uncivilized child should show the same type of mental expression in a highly civilized setting, or vice versa, then I am sure we would consider it both abnormal and undesirable, not because it necessarily indicates mental disease or feeble-mindedness but because it does indicate that the child has not been properly trained and conditioned to meet efficiently or successfully the complicated business of living, and all that this means, in the civilization in which he finds himself. In other words, the life's experiences have not been such as to be valuable to him in building up knowledge necessary to determine successful action to this new situation. Therefore, in considering "what a normal child is mentally" we must first compare the ways in which his mentality is expressed with the styles of mental expression of those with whom he lives, in consideration with the degree of success this method of expression enables him to live happily and successfully with the group.

Through psychological methods we can determine quantity of certain aspects of mind, but as yet through psychological methods we can determine quality only to slight degree. Quantity in so far as portraying academic possibilities, but not quality, in terms of successful usage in social or academic efficiency and accomplishment. We can only study mind as expressed by mind. This means a study of how a child acts, what he says and does, how and why he does it and whether or not it has a purposive meaning. We might add further, is the thing he does and the way in which he does it valuable to him in making satisfactory adjustments to the environment in which he lives? If it is, it might be considered as normal; if it is not, it might be considered as abnormal. Yet this does not seem to be altogether true, nor does it accurately fit all types of cases, because we often see a child react thoroughly normal in his home and not at all normal in the school or in the community. A child may start to school with all the physical possibilities of normal mentality and yet have certain attitudes toward school, as result of which he does not use properly nor successfully these attributes to the school setting. For instance, if this child has been threatened as a means of punishment with being whipped and punished for showing certain types of behavior in school, he approaches his school

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with abnormal fears. In the school he might be considered abnormal. An aesthetic child may not make a good adjustment to a mechanical world. Perhaps it would be better, should we say, is the thing he does and the way in which he does it constructive to the purposive meaning behind the act and though not always successful to him in making good adjustments to the environment in which he lives, is not detrimental to the personal rights of any?

The difficult thing for adults to remember is that the child is living in an adult world, if interpreted in adult terms, and is a savage mentally as determined by the life's experience and the knowledge thus obtained, if he is expected to live up to and follow all the adult styles and standards. While there should be child standards, they should be built up on childish patterns. It is just as essential to realize that the child's intellect, emotions and feelings are as immature as are his stomach and digestive system. It is no easier for a child to digest and assimilate mentally the mental diet of the adult than it is for him to digest and assimilate physiologically the coarser foods of the adult food diet. The normal child then mentally is not the adult who has not grown up, but is a sensitive, living bunch of protoplasm in the form of the human, with a highly organized nervous system being fashioned into adulthood. This adulthood must depend much upon the fashioning process of childhood.

The normal child is fortified by having a good physique and all the healthy organs necessary for human function, a central nervous system capable of normal function with a mentality in proportion to its age and the life's experiences incident to that age. Neither is the physical nor mental development of a two year old child the same as that of the six year old child. Neither is the physical and mental development exactly the same in all two year old children. No two children may react in the same way in the same social setting. It is difficult, however, for two children to have exactly the same social setting. These differences depend in part upon the influences of heredity, in the determination of temperament and trends. This makes for individual differences in interests, desires, likes and dislikes, and abilities and disabilities and yet remain in the range of normality.

We know that the race horse is hereditarily different from the draft horse, and while they both have the physical characteristics of the species, they do not have the same personalities, temperaments or abilities. They must be trained differently in order to best fit them for the purposes their natural trends direct. This is no less true with human beings, and should be constantly borne in mind in considering child life and normal child mentality.

Two children may not react the same to the same environment because of temperamental differences, as determined by heredity influences, and should not in every instance be expected to do so. When such a child, who is supposed to react abnormal, is understood in terms of his interests and urges, he is often found to be reacting normally for his natural trends and the environment of the moment. Such children are of the aesthetic type and feel and think differently from the mechanical and seemingly more practical child, hence the aesthetic child, the one who has his natural trends toward the finer things, the beautiful, such as art, music, rhythm, etc., may find many conflicts and oppositions in a setting constantly opposed to such trends. Often such a child becomes timid and shy, and is considered abnormal. Such a child may be thoroughly normal mentally, but is misunderstood or out of tune with his environment. While such a child may be thoroughly normal, unless his individualities are understood and carefully considered during this normal stage of childhood he may be so badly conditioned that he may react badly not only during childhood, but on through into adolescence and use unsuccessfully the traits he might have decided capabilities for.

Maladjustment, especially in younger childhood, may be chiefly indicated by undesirable habits, such as thumbsucking, nail-biting, enuresis, masturbation, peculiar food fads, night terrors, etc., or it may be indicated by the child's personality traits, by sensitiveness, seclusiveness, apathy, day dreaming, excessive imagination and fanciful lying, nervousness, moodiness, obstinacy, quarrelsomeness, selfishness, laziness, lack of ambition or interest, fearfulness, inability to get along with others, general restlessness, wanderlust, etc., and it may be displayed by undesirable behavior such as disobedience, teasing, temper tantrums, bragging or showing off, defiance of authority, seeking bad companions, keeping late hours, lying, stealing, truancy, destructiveness, cruelty to persons or animals, sex activities, etc.

We should look upon these things as merely symptoms, as the outward manifestations of serious underlying disturbances, which in the normal child who has no physical reasons, and who is not feeble-minded, must be found in the social sphere. In the main, it will be found to be the childish way of coping with some misunderstood situation. A normal child wants; he has his desires but he does not steal; he may use various methods of getting the things he wants other than stealing. This does not necessarily mean abnormal mentality in the terms of sanity but it does mean abnormal in the use of mentality as determined by the social laws of the time.

From babyhood, through childhood certain functions develop at certain ages, depending upon physical growth and development, much depending upon the development of the central nervous system. In babyhood there is no conscious men-

tality and little or no co-ordinated muscular activity. All action is reflexly aroused through various stimuli. As acts become co-ordinated and remembered mentality begins. From this point on, the natural trends determined by heredity are conditioned and the mentality moulded and shaped by the life's experience. The normal child mentally is a child who has been properly conditioned from early infancy. In other words, he is his heredity tendencies, plus what the adults in his environment have made him.

Every normal child has certain definite tendencies which may be termed instinctive. McDougal says, "instinct is energizing force" and it is these forces that create action or effort. The ways in which these forces are expended depend upon many things, the natural tendencies as determined by heredity, the patterns from which copies are made and the various influences upon the emotions. As the result of experiments and studies with children, John B. Watson says there are three "typical" modes of behavior indicating instinctive emotions, namely rage, love and fear. Since they are observable practically from birth they may be called fundamental trends. While children may show behavior expressing either or all of these instinctive emotions we know that if expressed in one way it becomes highly constructive and inductive to self-preservation and self-perpetuation, whereas, if expressed in another way it becomes highly destructive and may lead to starvation or extinction. That these functions have been made instinctive emotions in the scheme of things, to use a bit of speculation, within all probability has been for the set purpose of aiding in self-preservation and self-perpetuation.

These instinctive emotions are definitely subjected to conditioning and training just as certainly as is muscular dexterity. The normal child is one who is being so conditioned that the emotions, rage, love and fear have a constructive significance,—the child in whom they are so completely balanced that they lead him into safety and comfort rather than danger and anxiety. To illustrate, the normal child has fears through which he is directed into healthy habits of living and away from natural dangers, not the fears through which he develops a morbid dread of crossing streets; nor the morbid fear of disease which may end in hypochondriasis. The normal child has periods of rage through which he is able to fight his own battles and take his own part, not the anger that makes him weak and shiver and ineffectual at battles. The normal child has love through which he is companionable, sociable, able to mix with his playmates, and finally mate and reproduce, not the love that is so self-centered that he becomes an egotistical snob, unsociable and paranoid in trend.

The strength of these instinctive forces are probably determined by something innate but are conditioned into directions of usage by environment.

To sum up, a normal child mentally is the child who has normal native intelligence, who has lived in an environment in which he has been understood, and has understood himself, in which he has had opportunities to develop his mental interests and abilities, in which the emotional forces have been properly balanced, with the formation of correct attitudes toward life and toward work.

DISCUSSION

HENRY C. SCHUMACHER, M.D., Cleveland: Dr. North, in this excellent paper, has shown quite clearly that both the factors of heredity and environment must be considered in an attempt to derive an understanding of what is a normal child mentally.

For the present let us assume that a child has been born without injury and who to the best of our knowledge is not handicapped through heredity. To be sure, we are not expecting this child to be an ideal, a perfect one, but an *average* child. I insert this for, of necessity, in any discussion of environmental factors influencing the subsequent growth of the child for good or for bad the factor of difference, one from the other, in biological hereditary make-up must be recognized. That is to say, the effects of environmental factors on the human organism do not differ only because of the difference in strength of environmental stimuli but also because of the difference in biological make-up of the organism upon which they are acting. This latter fact is too frequently overlooked and leads to the oft repeated criticism of the environmentalist that he ignores the object upon which the stimuli play.

Now with this clearly in mind, what factors may make a child of good biological heredity into an abnormal child mentally? It seems to me five factors can be singled out for discussion. Doubtless there are many more.

First, the organic health of the child. Even the normal child is subject to injury through disease and physical trauma. Such injuries may leave actual organic inferiorities in their wake which may make adjustment difficult if not practically impossible. Or because of mishandling of the child during his illness or/and convalescence the child may come to use the illness for his own ends. Thus he may react later on to organic inferiorities actually no longer present in order to arouse the sympathy and to gain the attention given him during his illness or/and convalescence or as a conversion symptom for his psychic conflicts. It is, therefore, highly important to evaluate carefully the history of previous organic disease or trauma not only for the possible organic after-effects but also because of the emotional reactions engendered.

A second environmental factor of great importance is the parent-child relationship. This relationship is by no means a simple one; rather it is a highly complex one. Not only must one evaluate the parent-child relationship but also the child-child or children relationship as well as the parent-parent relationship and its effect upon the child. One can see, therefore, how intricate this relationship in actual practice really is. Take, for example, the factor of ordinal position in the family. Do parents treat all children alike? What about their attitude toward the first born; the last born—the baby? What is their attitude, particularly mother's, toward the unwanted

child? In certain instances he remains unwanted and is neglected. In other instances, probably because of a sense of guilt, such a child is overprotected.

The question of the sex of the child is another important consideration, both from the point of view of the parents and the child's reaction to the parents attitude as well as the child's whole outlook on life because it is biologically of one sex or the other. This factor of sex is one which may seriously warp a child's outlook on life.

Then too, we have the whole question of economic and social pressures and their effect on the child's attitudes. This topic is so broad I can only hint at some of the more important aspects of the subject. In the economically inferior group the child is subject to all the ill effects of overcrowding. Diseases like rickets, tuberculosis and congenital syphilis are rife among this group. Children in this group are often witnesses of sexual relationships, normal, abnormal and irregular. The dreary picture of life presented them makes such children overvaluate pleasure, to obtain which they will sacrifice much and run grave risks. If frustrated they revert to phantasy and withdrawal from the realities of life or engage in antisocial activities in their attempt to obtain these overvaluated pleasures.

In the economically middle group we find the child constantly overstimulated in the parents desperate attempt to have him achieve, while in the economically superior group the child is made to feel himself superior to the other classes. He is taught to feel that manual labor is beneath him. Some of these children never develop any abiding interests in life.

And lastly, the entire question of the kind of education the child receives from the moment of birth onward—his fundamental habit training and socialization being more important than his formal academic training—has much to do with the development of his personality.

It is not my intention to make any one of these factors the all important one. Rather, it is the inter-relationship of these factors which I would stress. Only as one grasps the entire situation and sees how this factor or/and that acting upon a particular, unique organism with its inborn trends and tendencies does one come to a realization of how complex a thing the development of personality and character actually is and how readily the, to all intents and purposes, normal child may become an abnormal and antisocial personality.

Trichomonas Vaginalis

ROBERT L. FAULKNER, M.D., Cleveland

TRICHOMONAS vaginalis is a flagellated protozoon parasitic in the vagina. Similar parasites are found occasionally in the urine of both male and female and quite frequently in the intestinal tract where they are sometimes associated with diarrhoea. In the genital tract of the female it is the cause of certain cases of resistant recurrent leukorrhea.

The organism was first described in 1837 by Donne[1]. Many authorities have reported its presence in the vagina since that time, but there always has been doubt as to its pathogenicity. Most writers in the past, however, have stated that it is present only when the vaginal secretions are abnormally increased.

New interest in this flagellate was created in 1928, when Greenhill[1] published a report of 56 patients whom he considered infected with this protozoon. Davis[2] of Milwaukee has published two or three papers since on the same subject.

The flagellates are looked for in fresh preparations. The reason we do not know more about them is perhaps because the examination of fresh preparations has not to date become a part of routine gynecological examination. With some experience the protozoons can be detected in Gram stains. I have not been able to see them in methylene blue preparations. They seem never to be present when the smear is positive for gonococci.

To make fresh preparations, a generous loopful of the secretion is taken from the interior of the vagina close to the inflamed mucosa and mixed with a drop of salt solution on a slide, or a hanging drop preparation is used. The organisms are motile, easy to see with the high-dry objective, especially if the light is somewhat cut down. They always are symbiotic with many different bacteria. At first glance they resemble paramecia. Without special precautions they will stay alive for half an hour or more at ordinary room temperature. As they begin to die pus cells and bacteria stick to them. With practice dead ones and encapsulated forms may be recognized. Two main forms are seen in the vagina. The more common one is larger than a pus cell and has four flagellae in rapid motion. The other variety is smaller—about the size of a pus cell—and seems to have a single long flagellum which whips relatively slowly back and forth. The undulating membrane from which the organisms gets its motive power may be seen in either form.

In Gram's stain the trichomonas is recognized chiefly by its size and the oval single nucleus. The flagellae do not stain, but with care may be seen on some organisms coming off the cell on the side nearest the nucleus.

Since the summer of 1929 I have been examining fresh preparations in leukorrhea patients, in private practice and in the morning female venereal clinics at Lakeside Hospital. I have found the organisms present in great numbers in a certain group of severe leukorrheas, where the gonococcus could never be demonstrated, and believe that they, rather than the symbiotic bacteria are pathogenic, for the following reasons:

1. Because of a fairly uniform clinical picture.
2. Because the behavior of these leukorrheas

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corresponds with what we know of the cultural requirements of this organism. The protozoon cannot be cultured without blood serum. In the vagina the organisms set up an inflammation with profuse exduate, and in the more severe cases the discharge may be frankly blood stained. Also, the tendency of these leukorrheas to become worse after menstrual or any other bleeding tends to support this view.

3. Because with proper treatment the diminution in amount of discharge and in the number of pus cells present, is presaged by a sharp fall in the numbers of trichomonas seen.

4. Because if treatment is stopped while a few, or even one trichomonas can be found in several preparations, the discharge will recur when the protozoons have multiplied sufficiently to produce it—usually after the next menstrual period.

THE CLINICAL PICTURE

The chief complaint is of a profuse, often odorous, burning, irrigating vaginal discharge. Occasionally there is itching. (It goes without saying that the urine should always be examined for sugar.) Sometimes the burning discomfort of this condition is so intense that the patient cannot sleep at night. Occasionally the parts are scratched and secondary infections started up.

On examination of the severe case, the first thing that strikes the eye is the profuse discharge and the fiery red inflamed appearance of all the mucous membranes. The discharge is usually of a greenish yellow color, undoubtedly easy to confuse with that of an acute gonorrhoea. Sometimes, though, it is thin and watery. In such a case the mucous membrane inflammation stands out conspicuously. The secretions may be either acid or alkaline. In one instance I have seen numerous small flat condylomata over the labia. They are described as frequently present in this disease.

The urethra apparently may be infected, but in cases of profuse discharge care must be exercised to discriminate between soiling and actual infection. It is not the rule for these patients to complain of urethral burning, though the urine may burn exquisitely as it comes in contact with the inflamed parts.

The remainder of the picture is that of a generalized, or patchy vaginitis. Hence, the condition is called trichomonas vaginalis vaginitis. I would emphasize that inflammation of the vaginal mucous membranes is not necessarily all over—vaginal vault alone may be inflamed, or irregular areas present anywhere in the vagina. The cervix often looks normal, or it may coincidently show any of the ordinary eversions or lacerations. To date it has not been incriminated in harboring the flagellates.

Source of Infection—Not known. Most cases seem to depend on coitus for their initiation. The flagellates die so easily under unfavorable conditions that direct implantation would seem necessary. Do they come from the intestinal tract? No male partners of infected patients have as yet been proved carriers of urinary or prostatic flagellates.

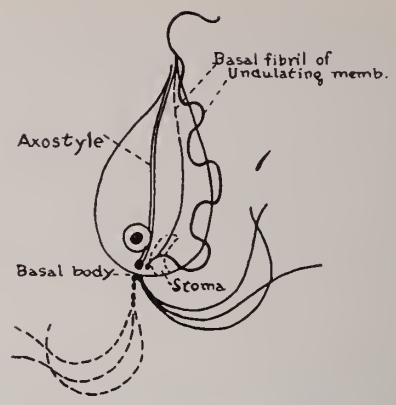


Fig. 1. Shows essential structures of the Trchomonas vaginalis. (From Rodenwaldt after Greenhill).

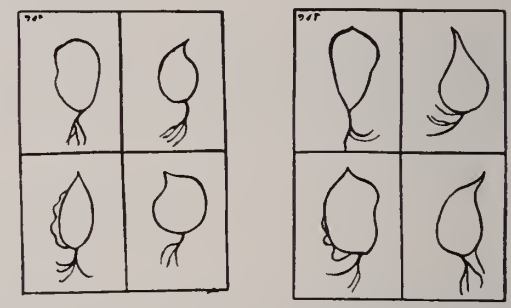


Fig. 2. Shows Trichomonas vaginalis in fresh preparation.

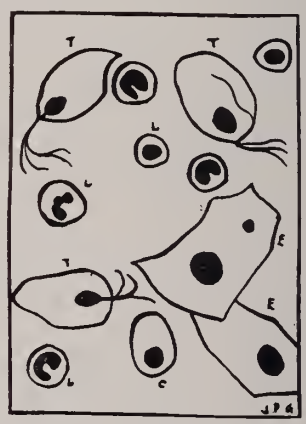


Fig. 3. Gram stain. T, Trichomonas; C. Cyst form of Trichomonas; E. epithelial cell; L. leucocyte. (After Greenhill).

Treatment—Not the drugs used, but the method of treatment is important in this group of patients. There are no set methods, but two main types of treatment have so far been used. I have used a modified Greenhill's technique so far with good results. The vagina is scrubbed, first, with gauze and tincture of green soap. If the mucous membranes are so sensitive gauze cannot be used,

cotton is substituted the first time or two. The vagina is then rinsed out and thoroughly dried. Then every square millimeter of vagina and vestibule is painted with a fresh 10 per cent aqueous solution of methylene blue. Probably mercurochrome in 5 or 10 per cent (alcohol acetone) solution is just as good. After this the vagina is packed for 24 hours with a boroglyceride pack, held in place by a dry one to prevent leakage. Greenhill uses a boroglyceride methylene blue solution and omits painting with methylene blue. Both methods attain the same object. Another form of treatment is to coat or fill the vagina with an alkaline powder—soda bicarbonate.

Lactic acid douches, 1 or 2 per cent, are advisable, with the idea of restoring the normal vaginal flora. The patient is cautioned to avoid contamination of the genital tract after bowel movements.

The effect in one of these acute cases with a single well directed treatment is remarkable. The terrible fullness and burning in the vagina is relieved at once and most of the discharge disappears after one or two treatments. To prevent recurrence, the patient must be seen after menstruation for a month or two and the secretions tested for flagellates. In testing for cures it is important to be sure the patient has not douched within 36 or 48 hours of the time the preparations are made.

To date I have found trichomonas vaginalis in the following types of cases:

1. In seven patients with long standing recurrent leuorrhea and normal cervices. Some of these had been treated for months by ordinary methods with temporary relief, but not cured. One had been made worse by cauterizing the cervix.

2. In one patient with a leukorrhea, and who had had a panhysterectomy two years before.

3. In two young unmarried women with discharges troublesome only after menstruation.

4. In two patients with irritating leukorrhea after the menopause.

5. In one patient with a foul leukorrhea during pregnancy.

6. In a final patient who has an exacerbation of leukorrhea without gonococci, four months after a gonorrhoeal infection was pronounced cured. In this case perhaps the normal vaginal flora was thrown out of order by the preceding gonorrheal infection and treatment therefor.

All of these patients were relieved of symptoms at once by the treatment previously outlined. The earlier cases have been well for three to four months. There are four of these where follow-up has been strict enough and long enough to make me believe they are permanently well. The worst patient was the one with the pregnancy. Symptoms were relieved, but she still had some discharge when she had her baby. Perhaps this was because it was not felt wise to carry out vigorous or complete treatment for the flagellates in the latter weeks of pregnancy.

In conclusion, therefore, evidence is presented that certain cases of resistant leukorrhea are caused by the flagellate, trichomonas vaginalis, occupying perhaps in the vagina a position analogous to that of Vincent organisms in the oral cavity; or implanted from without. It is highly desirable that more be learned of the life history of this parasite.

1510 KEITH BLDG.

REFERENCES

1. Greenhill, J. P.: American Journal Obst. and Gyn. 16:879, 1928.

2. Davis, C. H.: American Journal Obst. and Gyn. 18:575, 1929.

The Gold Headed Cane

PAUL D. SCOFIELD, M.D., Litt.B., Columbus

"Physic of old, her entry made,
Beneath th' immense full-bottom's shade;
While the gilt cane, with solemn pride,
To each sagacious nose apply'd
Seemed but a necessary prop,
To bear the weight of wig at top."

This verse refers to the typical physician of the 17th Century with his silk coat, breeches and stockings, buckled shoes, lace ruffles, full-bottomed wig, and his gold headed cane. Such a cane, in those days, was carried by physicians for a two-fold purpose; it was symbolic of the wand of Aesculapius for one, but was used for a more practical purpose as the knob on top contained a vinaigrette which was held to the nose to ward off noxious vapors of the sick room.

From this promiscious cane carrying habit emerged the one Gold Headed Cane that has taken its place in English medical history. This cane was borne shortly after the accession of William and Mary, in 1689, and its active life extended over a period of 130 years. It was a malacca with a long metal ferrule, and a gold handle shaped like a crutch bearing the coat-of-arms of Radcliffe, Mead, Askew, Pitcairn, and Baillie.

While not having its conception as an honor to be bestowed upon the most worthy physician of London, the cane acquired this sentiment as it passed through the successive hands of six famous physicians, the first of whom was Radcliffe.

RADCLIFFE

The gold headed cane is first introduced to us in the autumn of 1689, the year of Sydenham's death, at which time it was carried by Dr. Radcliffe on a professional visit to King William the 3rd. The King was suffering from asthma that had fallen on his lungs, and the Doctor advised him that "the rheum is dripping on your lungs and will be of fatal consequence to you unless it be otherwise diverted". Radcliffe was successful in this royal case by prescribing medicines that promoted the flow of saliva, and the King so fully recovered that several months later fought in the Battle of the Boyne. Another prescription of interest is one that Dr. Radcliffe used in treating a case of quinsy. Having found that no internal or external application had been of service he ordered his own servants to secure a hasty pudding, and gave them private instructions concerning it. The pudding was brought and placed in full view of the patient. "Come Jack and Dick," said Radcliffe, "eat as quickly as possible, you have had no breakfast this morning." Both began to eat but on Jack's dipping once only for Dick's twice a quarrel arose and they began to pelt each other with handfuls of the hot pudding. At this the patient was seized with a hearty fit of laughter and the quinsy burst and discharged its contents.

That Dr. Radcliffe remained a bachelor the gold headed cane ascribes to an early disappointment in love. Of which affair the Doctor observes that "Mrs. Mary is a very deserving gentlewoman, no doubt; but her father must pardon me, if I think her by no means fit to be my wife, since she is or ought to be another man's already. Well! hanging and marrying certainly go by destiny; and if I had been guilty of the last I should scarcely have escaped the first." Yet later in life he again entered the lists with Cupid and was again unsuccessful,—to such an extent that Steel, in the Tatler, described him as a mourning Aesculapius—the languishing hopeless lover of the divine Hebe, the emblem of youth and beauty.

Although acting as one of the court physicians he was not called on to see King William in his last illness due to a slight indiscretion. For on one of his visits to the court Radcliffe, upon seeing the King's large dropsical ankles, exclaimed: "I would not have your Majesty's two legs for your Majesty's three kingdoms." He did not entirely lose royal favor, however, for Queen Anne sent for him when she was dying. He was unable to respond being confined to his bed with gout. The Queen died soon afterwards and the enemies of Radcliffe attributed her death to his absence. He became so unpopular as a result of this false accusation that he was forced to retire to the country where he died, three months after the Queen, in November, 1714.

MEAD

Shortly before Radcliffe's death he presented the gold headed cane to Dr. Mead, an accomplished scholar. The cane, however, speaks little of Mead's life but rather of the men with whom he associated, Dr. Cheyne, and Sir Hans Sloan. The latter's treatment of pleurisy was rather unique. "I ordered him to be bled in the arm to about 10 ounces, and gave him an emulsion and a pectoral decoction of barley, liquorish, and raisins. I immediately found him much better and ordered him to continue this, and to take of crab's eyes and sal prunellae, of each half a drachm, and to swallow morning and evening the half on't, drinking afterwards a pectoral draught, and in case of relapse I ordered him to be bled again."

The cane then describes the introduction of smallpox vaccination into England by Lady Mary Montague, who had allowed her son to be vaccinated while in the East. On returning to England she interested Caroline, Princess of Wales, whose daughter had almost died from smallpox, in vaccination and through her reached the King. His Majesty, George the First pardoned six felons on condition that they would submit to the experiment. The innoculation was successful and they escaped the hangman's noose. Dr. Mead secured another criminal and succesfully vaccinated her by the Chinese method—which was the introduction of skins of dried pustules with a grain of musk into the nostrils. To Dr. Mead is attributed the credit of having introduced the method of purgation in the secondary fever of smallpox. He also introduced a new method of tapping in acites which was, while tapping to make external pressure with the hands and afterwards apply a bandage to the belly. By this method he tapped Dame Mary Page 66 times in 67 months, withdrawing 240 gallons of fluid. This was so unusual that when Dame Mary died the full details of her operations were recorded on her tombstone.

Mead records the first use of quinine, which occurred in Peru. Some cinchona trees were thrown into a pool of water and remained there so long the water became bitter and the natives refused to drink it. However, one of the natives was seized with a violent fever and being unable to find any other water was forced to drink from the pool, after which his fever left him.

Pope, who was then the popular poet of the day, echoed the sentiment of London in that "I'll try what Mead and Cheselden advises." It was these two, the latter a skilled lithotomist, who were called to the bedside of Sir Isaac Newton, who was suffering from a stone in the bladder. They were unable to aid the distinguished scientist, however, and he died March 20, 1726. It was Mead who persuaded Guy, a wealthy citizen of London, to give his immense fortune to the building of that hospital which bears his name. It was Mead also who attended Queen Anne and tactfully predicted her fast approaching death,

thus avoiding a political furor that was brewing at the time. Dr. Mead died Feb. 16, 1754 at the age of 81. It was said of him, that of all physicians he gained the most, spent the most, and enjoyed the highest fame during his lifetime.

ASKEW

There is no mention of the gold headed cane in Mead's will but it was probably a gift to his friend Dr. Askew. Whether this change of owners was unfavorable to the cane I do not know, but nevertheless Dr. Askew is almost ignored in the autobiography. Instead much space is given Dr. Heberden, who appears to have been a much better physician than Askew. Dr. Askew was noted chiefly as a confirmed bibliophile, and practically spent his lifetime in collecting rare volumes, first editions, and priceless manuscripts. He contributed nothing to medical literature and posterity remembers him chiefly as a bibliomaniac.

WILLIAM PITCAIRN

The autobiography states that the cane was left to William Pitcairn by his good friend Dr. Askew. Pitcairn studied at Leyden in 1734 and was graduated M.D. at Rheims, later becoming private tutor to the Duke of Hamilton. He afterward affiliated with St. Bartholomew's Hospital, one of the wards of which still bears his name, and it was here that he shocked the medical world by advocating a freer use of opium in fevers.

He was elected President of the College of Physicians in 1775 and four years later became treasurer of St. Bartholomew's Hospital. He resigned as President of the College in 1784 and spent the remaining seven years of his life in cultivating a botanical garden at his home.

Perhaps one of the most interesting features of the wanderings of the gold headed cane is its description of the College of Physicians, where it was frequently carried by Pitcairn. It is impossible to include such subject matter into a paper of this length, however, I'll venture Pitcairn's remarks incited by the portrait of Sir Edmund King in the Censors' Room of the College. "To be a court Physician now-a-days does not involve quite so much responsibility as formerly, for the Doctor whose likeness is before us, incurred considerable hazard by saving for a time the life of His Majesty Charles the Second. When the King was first seized with his last illness, it was in his bedchamber, where he was surprised by an apoplectic fit, so that, if by God's providence Dr. King had not been accidently present to let him blood, His Majesty had certainly died that moment. It was considered a mark of extraordinary dexterity, resolution and presence of mind in the Doctor to let him blood in the very paroxysm, without staying the coming of other physicians, which regularly should have been done, and for want of which it was at first thought that he would require a regular pardon. The Privy Council, however, approved of what he had done, and ordered him 1000 pounds—which, by the by, was never paid him."

DAVID PITCAIRN

On the death of William Pitcairn, in 1791, the cane was bequeathed to his nephew Dr. David Pitcairn, who took his Doctor's degree at Cambridge and had been elected physician to St. Bartholomew's Hospital. His treatment of tuberculosis differed little from that of the present, for after visiting a lady, ill from tuberculosis, left a prescription for infusion of roses and mineral acid. On being rubuked for such inert treatment he replied: "The last thing a physician learns, in the course of his experience, is to know when to do nothing, but quietly to wait, and allow nature and time to have fair play in checking the progress of disease, and gradually restoring the strength and health of the patient". Pitcairn was forced to give up his profession, in 1798, because "of a spitting of blood." But after a stay of 18 months in Portgual was much improved and returned to London. Eleven years later he fell a victim of a disease, hitherto unobserved by medical men, and in his dying moments wrote out his symptoms. "The mouth of the larynx is so much narrowed, that the vital functions are actually extinguished by the stricture." He died of inflammation of the larynx on the 17th of April, 1809.

BAILLIE

Thus the gold headed cane passed into the hands of its last master, Dr. Baillie, nephew of John and William Hunter. Following the example of his learned uncles Dr. Baillie taught anatomy for 20 years, and he dedicated his work on Morbid Anatomy to David Pitcairn. It was a maxim of his that the most successful treatment of patients depended upon the exertion of good common sense, guided by competent professional knowledge. "It is very seldom", he used to say, "that diseases are found pure and unmixed, as they are commonly described by authors; and there is almost an endless variety of constitutions. The treatment must be adapted to this mixture and variety—". Perhaps this trait of common sense, combined with a certain amount of irritation, is the source of the following antedote. After listening, with torture, to a long account of ficticious ills from a lady who was going to the opera that evening, he happily escaped from the room. He was summoned back, however, by this neurasthenic female and asked whether or not, on her return from the opera, she might eat some oysters. "Yes, Ma'am" said Baillie, "shells and all".

In 1819 Dr. Baillie presented to the College his entire collection of anatomical preparations, together with 600 pounds for their preservation. He lived only four years after this donation. It is to Dr. Baillie that medicine owes the modern

beginning of physical examination of the patient, also the application of morbid anatomy.

Thus ended the active life of the gold headed cane as it was presented to the New College of Physicians by Dr. Baillie's widow. Having served its purpose well it was retired to the relative obscurity of the London museum in June of 1825.

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The Common Cold as the Source of Most Illness

The common cold is the most frequent cause of illness, according to Dr. R. C. Williams, assistant surgeon general of the U. S. Public Health Service, who bases his statement on surveys conducted by the health service.

It also accounts for more days lost from work, from school, from production activities of every type, than can be charged to any other disease, he declares.

"As the major source of disability and death-dealing respiratory disease, we would convict it on almost every count", Dr. Williams said in a recent statement.

"Its control, if not its conquest, has become a challenge to modern medical science and hygiene. If common colds were materially abated or prevented, the occurrence of their more serious consequences would be greatly diminished, and 'disease of the respiratory system' would tumble from their high position which they now occupy among the causes of death.

"Interesting studies of the prevalence of various diseases in a typical American community have valuable information and show the importance of the common cold from a morbidity and economic standpoint.

"The city in which these studies were conducted may be said to be typical of many other cities of its size in the eastern section of the United States. The principal object of this study was a record of illnesses that were experienced by a population group composed of persons of all ages and both sexes, and in no remarkable respect unusual.

"The records of illnesses obtained were of illnesses as reported to experienced investigators. The reports were made by the household informant, usually the wife, either the sickness as experienced by herself or as she observed it in her family.

"The rate of sickness from colds and bronchitis was the highest, being annually 418.6 per 1,000 persons. Influenza and grippe came second with a rate of 143.2 per 1,000; diseases of the digestive system were 96.5 per 1,000; tonsillitis and sore throat 65.7; confinement and other puerperal causes 46.9; diseases of the nervous system, including headaches, 44.1; accidents and other external causes, 39.5; measles, 34.2; whooping cough, 22.6; rheumatism and lumbago, 21.8; heart and other circulatory diseases, 18.3. The list contains 10 or 11 more items and concludes with hay fever and asthma which is shown to have caused 5.8 cases of sickness each year per 1,000 persons.

"From this study fairly accurate records of real illnesses were secured. As a matter of fact less than 5 per cent of the illnesses of exactly stated duration were recorded as one day or less in duration; nearly 80 per cent were three days longer in duration.

"Approximately 40 per cent were not only disabling but caused confinement to bed. It is evident, therefore, that in the main the illnesses recorded were more than trivial in their character, in spite of the fact that in some instances mere symptoms were given as diagnosis.

"The percentage distribution of illnesses in this typical community as revealed by these studies is of considerable interest. Illnesses due to respiratory diseases head the list with a 61.4 per cent of total illnesses. These studies indicate that a comparatively small percentage of the respiratory diseases are attended by physicians. According to these records, physicians were in attendance in only 14 per cent of the cases of colds, 7 per cent of the cases of coryza.

"Information collected by the Public Health Service for various groups in studies relating to school hygiene indicates that respiratory diseases cause 46 per cent of all the illnesses that occurred during a four-year period in a given group, or an average of slightly more than one respiratory attack per child per year. Of the 16,475 respiratory attacks, 66 per cent were reported simply as 'colds,' 21 per cent as tonsillitis or sore throat, and 10 per cent as influenza or grippe. Sore throat and grippe were the most frequent names used in the last two groups.

"Most of the influenza and grippe occurred in two outbreaks. For the group above mentioned, during the four years over which this study extended, the time lost from school on account of respiratory diseases was 3.17 days per child per year for the different respiratory conditions were as follows: Colds, 1.70; influenza and croup, .63; tonsillitis and sore throat, .63; bronchitis and cough, .06; pneumonia, .09; croup (nondiphtheritic), .04; other respiratory diseases, .02."

Announcement has been made of the program to be presented at the International Assembly of the Inter-state Postgraduate Medical Association of North America, to be held at Minneapolis, Minn., October 20-24, inclusive. Among the Ohio physicians who will take part are: Dr. George W. Crile, Dr. Russell L. Haden, Dr. William E. Lower, Dr. William V. Mullin, Dr. Bernard H. Nichols, and Dr. T. Wingate Todd, all of Cleveland, and Dr. Jean S. Millard, Akron.

Annual Report on Ohio Workmen's Compensation Shows Increase in Industrial Injuries Reported and in Amounts Paid in Compensation

Interesting data relative to the activities carried on by the State Industrial Commission in administration of the Workmen's Compensation Fund of Ohio during the fiscal year, July 1, 1929, to June 30, 1930, is contained in the annual report of Dale W. Stump, supervisor of the Department of Claims, recently filed with Will T. Blake, Director of the Department of Industrial Relations.

Equally as interesting information concerning the actuarial condition of the Workmen's Compensation Fund is found in the annual report of E. I. Evans, chief actuary for the State Industrial Commission, covering the calendar year 1929.

The report of Claims Supervisor Stump shows that during the 12-months period ending June 30, 1930, there were 242,912 claims filed with the Commission, an increase of 3481 as compared to the preceding year. The claims filed were divided as follows: Medical expenses only, 179,335; claims for compensation, 62,343; death claims, 1234.

During the year there were 1487 occupational disease claims filed, 21 of which were death claims.

The report also contained tables showing the number of injury claims and the number of death claims filed with the Commission since September 1, 1913 when the State Industrial Commission superceded the old state liability board of awards. These are as follows:

INJURIES

State Fund	1,226,489
State Fund (medical only)	1,267,499
Public Employe	40,217
Section 22 (Self insurers)	221,596
Section 22 (Occupational Disease)	1,103
Section 27 (Defaulting employers)	3,610
Occupational Disease	7,260
Total	2,767,774

DEATHS

State Fund	10,377
Public Employers	893
Section 22	2,651
Section 22 (Occupational Disease)	1
Section 27	285
Occupational Disease	128
Total	14,335
Grand Total	2,782,009

The financial status of the Workmen's Compensation Fund is analyzed in the actuarial report of Mr. Evans.

The balanced assets and liabilities of the fund are shown to be $56,366,885.80. Listed among the liabilities is an item of $46,778,588.50 held as a reserve to cover awards on which payment is to be made over a period of years, or during the life of the injured worker. A sum of $2,801,772.03 also is held as a reserve to meet catastrophe losses, for example, such tragedies as the Cleveland Clinic fire.

Setting forth the reasons for maintaining a claim reserve of $46,778,588.50, the report said:

"Under the Workmen's Compensation Law benefits are paid over a long period of time, in fact the major portion of all benefits on account of injuries of a given year are to be paid out in later years. These losses must be paid out of premiums collected in the period in which they occur. They cannot be taken out of future premiums."

The following analysis of the claim reserve was given to show why this huge amount must be maintained to keep the Workmen's Compensation Fund on a sound actuarial basis:

3,400	Fatal claims where compensation is paid to dependents over a period of six to eight years	$ 8,737,475.00
796	Permanent total claims where compensation will be paid to claimant for remainder of his life	$ 5,691,800.00
981	Claims where the injury has already resulted in total disability of over two years and eventually, in all probability, will be declared a life case or become a fatal case	$12,364,400.00
2,896	Impairment claims where claimants are partially disabled and receive compensation based on their reduced earning capacity	$ 7,060,100.00
2,827	Indeterminate claims where the injury has not developed to a point where it can be determined what the ultimate result will be	$ 9,454,200.00
20,000	Minor temporary total, dismemberment claims such as loss of arm, fingers, etc., and concealed claims	$ 1,950,613.50
568	Court claims where the Commission has denied compensation and appeal has been made to the courts	$ 1,520,000.00

Receipts for the year ending December 31, 1929, were reported as $16,221,264.67. Disbursements were $16,282,539.08, an excess of $61,-274.41 over receipts.

An itemized statement of the disbursements for the year 1929 shows $11,491,907.58 paid out as compensation to employes or their beneficiaries. Medical fees disbursed during the 12-months period amounted to $3,682,181.47. Fees totaling $1,433,332.33 were paid out for hospital and nursing services for injured workmen.

The excess of disbursements is explained as follows in the report:

"The above statement shows a slight excess of disbursements for the year 1929, which is accounted for due to the Commission recently adopting the policy of granting awards in many impairment cases on a percentage loss of function and paying the same at $18.75 per week until paid out, rather than making an award on a wage impairment basis which in many cases would result in less than $18.75 per week but continue over a longer period of time. The claimant receives the same total amount of money but in

the first instance receives the same in a shorter period of time."

It is shown that the payroll covered for 1929 totaled $1.578,886,096.00 an increase of 7.3 per cent over 1928 and that the number of claims filed increased approximately 15 per cent.

Commenting on this angle of the report, Mr. Evans stated:

'The above comparison of payroll and claim increases of 1929 over 1928 discloses a more rapid increase of claims filed than of payroll covered. The payroll increased 7.3 per cent while claims filed increased 15 per cent. A portion of this increase of claims filed is due to more complete reporting of minor cases requiring only medical cost, however, there still remains an increase of claims over payroll and it is attributed to either an increase in accidents per man hour exposed, or to a reduction in payroll per man hour worked. In either case it warrants an increase in rate for such industries showing this trend as the premium rate is based on the payroll while compensation awards are governed by a maximum weekly rate."

A table of the revised premium rates, effective July 1, 1930, is carried in the report, showing a reduction of basic rates in 103 classifications, no change in 326 classifications and an increase in 166 classifications. The occupational disease rate remains the same—one cent per $100 payroll.

Interesting High Points in Ohio Vital Statistics of Past Year

Complete tabulation of the death and birth records of Ohio for the year 1929 has just been completed by the Division of Vital Statistics of the State Department of Health.

Some of the outstanding features of the report presented by I. C. Plummer, chief of the Division of Vital Statistics, are:

Ohio's death rate for 1929 was 12.07 per 1000 population, compared to 12.08 for 1928.

There were 81,306 deaths reported in 1929, compared to 80,146 in 1928.

There were 43,658 male deaths with a rate of 12.6 and 37,648 female deaths with a rate of 11.5 in 1929.

Of the increase in the number of deaths in 1929, 38.7 per cent was in the rural and 61.3 in the urban districts.

The death rate in the rural district was 12.0; in the urban, 12.8, compared to 11.8 in the rural district in 1928 and 12.2 in the urban in 1928.

There were 8032 deaths of children under one year of age in 1929, compared with 7964 in 1928.

The age period from 70 to 74 years was the greatest with 8109 deaths, six causes being responsible for 75.7 per cent of the deaths in this group as follows: heart disease, 2262; cerebral hemorrhage, 1313; cancer 951; nephritis, 839; pneumonia 412 and accidents, 312.

There were 227 deaths from persons over 95 years of age; eight deaths of persons over 100 years of age.

The most deaths occurred during the month of January (11,277); the fewest in August (5778).

The death rate for white persons was 11.6; for negro, 22.0; for Indian, Chinese and Japanese, 13.0.

Five causes were responsible for 49.6 per cent of all deaths reported in 1929, namely: heart disease, 14,940; cancer, 6883; pneumonia, 5998; accidents, 6401; nephritis, 5567, a total of 39,789.

Gallia County (with a state institution) had the highest death rate in the state, 20.8. The county having the highest rate without a state institution was Huron with 16.8. Perry and Putnam Counties with rates of 8.7 were the lowest.

The city without a state institution having the highest death rate was Painesville, 20.3. The lowest death rate for any municipality was 5.2, registered by Campbell.

There were 116,433 births recorded during 1929, with a rate of 17.3 per 1000 population, compared to 120,488 births during 1928, with a rate of 18.2.

Of the decrease of 4055 births, 63.3 per cent was in urban districts and 36.7 in the rural districts.

In 1929, there were 77,668 births in cities with a rate of 17.9 and 38,765 in rural districts with a rate of 16.3.

There were 106 boys born to every 100 girls, or 60,082 males and 56,351 females.

There were 1377 twin births and 15 triplet births.

The white birth rate was 17.1 and the negro, 21.8. There were 33 Chinese and 2 Japanese born.

Butler County had the highest birth rate with 25.8 and Noble County the lowest with 11.2.

Hamilton, with a birth rate of 31.6, ranked first among all cities.

Four hundred and four children were born to mothers fifteen years of age; 7314 births occurred to mothers 22 years of age; 7342 to mothers 23 years of age; 7133 to mothers 24 years of age and 145 to mothers 45 years of age or more. One colored mother and one foreign mother gave birth to their nineteenth child and one mother, colored, 49 years of age, gave birth to her 20th child.

Births totaling 33,593 occurred in maternity homes and hospitals.

At the recent meeting of the American Association for the Study of Goiter at Seattle, Washington, Doctor William F. Rienhoff, Jr., of Johns Hopkins University, Baltimore, Maryland, received the annual award of $300 for the best essay dealing with the goiter problem. Doctors O. P. Kimball, of Cleveland, Ohio, and E. P. and D. R. McCullagh, Cleveland Clinic Foundation, Cleveland, Ohio, and Robert P. Ball, of the University of Louisville, received honorable mention.

Comparison of Rural and Urban Health Factors Shows Many Differences But No Conclusive Advantage

Comparison of rural and urban sections from the standpoint of health is so complicated that an official judgment in favor of either country or city life cannot be reached, according to a study made by the U. S. Public Health Service.

"When it comes to a decision regarding the merits of living in rural or urban communities from a health standpoint, the Public Health Service has no comment to make", a summary of the investigation declares.

"Too many things enter into consideration when this discussion comes up for anyone to make an official statement that may serve as final judgment in favor of either type or locality", it is pointed out.

Analyzing further its findings, the report said:

"Many will point to the death rate in the cities being higher than in rural communities, but this in itself means very little. The death rate has been consistently higher in the urban districts than in the country but it must be remembered that many of those who are stricken with a fatal illness in the rural communities stay at their homes until the condition becomes critical and then move to the city, where they can secure hospital treatment of a better type generally.

"With this influx of the sick from the farm areas, it is only natural that the death rate should be larger in the places where hospital facilities are better. Tuberculosis is about the only disease which has a tendency to send its victims from the cities to seek the open air country. Even in this disease, those who are stricken stay at farm houses and the like only until the situation becomes hopeless, when they seek the sanitarium, which very often is located in well-populated cities, or close to them, so that when a death occurs, it is listed from that city.

"No one can deny, however, the tonic that can be obtained from two of nature's free treatments, the fresh air of the open fields and the sunshine, that is not hampered by tall buildings and smoky factories. It is obvious that one's longevity should be increased by life in the sparsely populated sections, just so long as there is no sickness present, but in this event, it is much better to be within calling distance of a physician, and an available hospital where serious trouble may be treated.

"Since 1900 there has been a decline in the death rate in both city and hamlet, but the rate of decline in the city has been swifter than in the rural sections. In 1900 the death rate in the city was 18.5 and in the rural sections, it was 15.1, while the latest comparative figures, in 1927, show that the city death rate has been cut to 12.5, while the rural rate was decreased to 10.4. In the treatment of diphtheria, the records indicate that the improvement in stemming the ravages of this disease has been better in cities than in the farming country, also.

"While birth control has apparently affected the birth-rate in the country, even more than in the city, the same argument that was used for the high death rate in the cities can be used for the birth rate. The decline in the rate in the rural communities has been more marked than in the centers of population since 1915, the figures available at the Public Health Service show. In 1915 the birth rate in rural communities was 26.0 and in the cities it was 23.8, but in 1927 the rate in the farm districts had dropped to 20.4 and in the cities to 20.9.

"These comparisons are not as conclusive as they would seem at first, since, in the last decade those living in rustic surroundings have received an influx of health knowledge, through the advent of the radio, and the spreading of health notes by the Public Health Service and the various State health departments. With this knowledge has come the realization that for those who are financially able to afford it, it is much safer to have childbirth take place in a hospital with modern conveniences and surroundings. Therefore, many of these people move to the city during that period, and the birth of the child is credited to the city in which the hospital is located.

"Records of the Public Health Service give the history of the successful fights that have been made both in cities and in the rural districts, against pulmonary tuberculosis and typhoid fever. In both of these instances, the campaigns have been more successful in the cities than in the villages and the rustic areas, for the difficulties that were met and are being met are not as great in well organized communities as in sections of the country which contain many isolated families.

"In 1910, the death rate from typhoid fever in the cities was 23.7 compared with 22.4 in the rural communities, but after the war on communicable disease was effectively launched, the statistics show that in 1927, the rate of deaths from this disease in the cities had dropped to 3.3, while in the farm areas, the rate had been cut to 7.4. Pulmonary tuberculosis, which in 1910 had a death rate of 160.9 in the urban communities, was whittled down to a rate of 71.5, while the rural rate of 110.5 in 1910 had been reduced to 71.2, in 1927.

"Many of the diseases that crop out later in life are started in childhood, and if there is any natural advantage to either the city or country children, it actually lies with the latter. The green fields and fresh open country is theirs, com-

pared to the brick-lined playground of the city children. But while they have this natural advantage, the children of the city have the knowledge that has been derived and imparted to them through efficient early schooling.

"To make up for so many of the advantages held by the city, the resident of the rural district has no incessant rush of industry to combat, no traffic jams to try his patience, and seldom has the temptations to dissipation that are so common to everyday life in the cities, and which has much to do with building up a death rate. It is impossible to state where the advantage lies, if any, but it will remain, in the final analysis, to the individual to use his discretion, and to use the advantages that he can perceive around him."

Lower Birth Rate Affected By Economic Factors

The continued decline in the birth rate in the United States is traceable directly to the change in living conditions and other economic conditions, according to Dr. T. F. Murphy, chief of the U. S. Bureau of Vital Statistics.

He points to the popularity of apartment house dwelling, and the increasing number of marriages where both the husband and wife are compelled to become wage-earners in order to meet the financial demands of an increased standard of living, as two of the important reasons for the decline in the nation's birthrate.

This same elevation in the standard of living of all classes of society has had its effect all the way down the line from the size of the family to the savings account of the wage-earner.

Quoting the observations made recently by one industrial leader:

"Wherever one turns, one who digs into realities must face the fact that although this is a rich country it does not contain as many rich people as most of us imagine. Ten-thousand dollar incomes are not common. Fifty-thousand dollar houses are more common. Four-thousand dollar automobiles are still commoner. And American tourists in Europe are even commoner. Most of us are in water that is a little too deep.

"To me the income tax reports in the United States are ugly. They contain a lesson that every parent should heed. The chances of children being sufficiently successful to make $10,000 a year or sufficiently eminent in other ways to get into 'Who's Who' are remote. Why not raise them, therefore, to enjoy life in the lower income brackets, and in the ranks of those whose doings and sayings are rarely reported in the public prints. This means a reconsideration of values, of course. Better have sons and daughters who can be solvent and happy on $4,000 a year than insolvent and unhappy on $10,000."

Effect of Heredity on Longevity

Controversies over the relative importance of heredity and environment have long been vogue and probably always will be.

Nevertheless, the issue offers some interesting topics for conversation and has resulted in studies that have given to science some valuable data.

Some interesting information relative to the part played by heredity and environment on mortality has been obtained by the Statistical Bureau of the Metropolitan Life Insurance Company through two investigations, one based on the insurance history of over 70,000 white men insured in the company during the years 1899 to 1902 and traced to their policy anniversary in 1928, and an earlier one, based on the experience of nearly 300,000 men insured in 34 life insurance companies during the years 1869 to 1899 and traced to their policy anniversary in 1900.

In both studies the mortality of applicants with long-lived parents was distinctly lower than those with short-lived parents, at all attained ages under observation. On the average, the death-rate of those with favorable parental longevity records was found to be nearly 20 per cent less than in the other group. but at some ages, as much as 30 per cent less.

It was ascertained that persons with long-lived parents have an average lifetime at least two to three years greater than those with a poor parental longevity. At age 25, those with long-lived parents had an expectation of life nearly two and one-half years greater than those with short-lived parents. The difference grew smaller with advancing age.

"The results of these studies," the Metropolitan report said, "confirm then the common belief that the duration of life depends, in part, on heredity. Earlier studies have yielded results in line with those of the present one, but criticism of the methods or the data used has cast some doubt on conclusions drawn from previous investigations. Moreover, for the first time the present study makes it possible to express the results in a form that is simple and easily understood. The differences in mortality and expectation of life in favor of persons with long-lived parents are clear-cut and show conclusively the effect of heredity on longevity. The gain in expectation of life from good heredity is, however, not as large as that obtained by the improvement in social and health conditions in recent years, and much less than that still attainable by such means. From the point of view of longevity, environment influences are still more powerful than heredity, important as that may be."

The Automobile as an Element in the Increase of Hay Fever ≠≠≠ Hereditary and Other Factors in the Five Million Sufferers

Suburban life and the increasing popularity of the automobile are causing hay fever to gain throughout the country, according to a bulletin issued by the U. S. Public Health Service.

These two factors bring more people into contact with pollen, which is the offending substance in the majority of cases of hay fever, it was pointed out.

Approximately 5,000,000 people or five per cent of the American population, suffer from either asthma or hay fever, or both, it is estimated.

Analyzing the hay fever situation at length, the Public Health Service survey said:

"Both hay fever and asthma are classed among the non-fatal diseases; but the suffering and depression experienced by the patient are very much underestimated by those who are fortunate enough to escape these conditions. Both diseases are frequently dreaded much more than are some of the more serious diseases.

"Seasonal hay fever patients not only have the prolonged irritation of nasal congestion and restless nights to look forward to as an annual occurrence, but they also usually realize that about two-thirds of them some time in their life will develop symptoms of asthma.

"Until relatively recent years there was little that could be done by the physician for the relief and cure of these two ailments. However, since methods and exact means of determining the exciting cause of symptoms, both in hay fever and asthma, have become known, the formerly hopeless situation has been changed.

"More attention to these diseases has been demanded of the physician; so much, indeed, that the care of the numerous sufferers of hay fever and asthma has been taken over by specialists who devote their entire time to the work. Henceforth, with some reservations, hay fever and asthma must be regarded as at least controllable —in many cases curable—and the unfortunate victims should not be neglected.

"As to the nature of hay fever and asthma, it will suffice for the present purpose to explain that these diseases are due to an inherited sensitivity of the mucous membrane of the eyes, nose, and bronchial tubes, to substances that are entirely innoxious to the normal individual. The offending substance, in the majority of cases of seasonal hay fever, is the pollen from the windborne pollinated plants, which includes many of the grasses, weeds, and trees.

"The season of attack, therefore, usually corresponds with the time of the year in which the respective pollen of these plants is being produced and blown into the air. For example, hay fever symptoms caused by Bermuda grass pollen occur in May, June and July; from the Russiain thistle pollen, in July, August and September; while from the ragweed pollen, the latter part of August, September and October.

"By no means are the pollens the entire cause of hay fever. They are practically always the cause of seasonal hay fever, but many patients have symptoms throughout the entire year, not due to pollen at all, but due to substances which are inhaled, such as dandruff from the various animals—for example, cats, dogs, rabbits, and horses—and from fowls, such as chickens, ducks, and geese, or from dusts, such as orris root, found in sachet powders, body powders, talcum powders, and face powders, or from other dusts, such as wheat flour.

"These patients suffer almost as severely at one time of the year as an another. The sensitiveness may be limited to a single substance, for example, dog hair or orris root; but usually the patient is sensitive to and has symptoms from a multitude of substances.

"Many children have asthma due to a sensitivity to one or more foods, or a combination of foods, which they eat, and from animal dander, pollen, or dusts which they breathe. Adults may have asthma due to sensitivity to one substance, such as feathers, or due to a multiplicity of substances, such as food, animal dander, or pollen; but usually the food is not such a great factor in adults as it is in children.

"The treatment of asthma and hay fever, both in children and adults, consists first of preventive measures, and second, in a process of lessening the individual's sensitivity to the offending substances, which, in the case of hay fever patients, means in the long run the prevention of asthma. It has been shown that inheritance determines largely whether or not an individual will develop hay fever or asthma and what time in life symptoms of the maladies will occur.

"From the standpoint of prevention, inheritance is a difficult factor to control. The other important factor is that of contact with those substances to which the patient might become sensitive and thereby have symptoms. From the standpoint of prevention it would be important, therefore, to protect the child who is born with the tendency to sensitivity, from coming in contact with massive doses of those substances to which patients frequently become sensitive.

"It has been shown that about 70 per cent of the children born of parents who have both hay fever and asthma themselves, will manifest symptoms of such diseases sometime in life; and if only

one of the parents has hay fever or asthma, about 40 per cent of their children will manifest symptoms sometime in life.

"Knowing that contact with substances such as animal danger of various sorts and powders of various kinds have much to do with determining whether or not a child born with the tendency to become sensitive, will develop that specific sensitivity, parents who have hay fever and asthma themselves should pay special attention to protect their children from intimate contact with dust of the various animals, such as dogs, cats, horses and cattle, and the dust from fowls.

"In other words, pets in the home should not be allowed. Feather beds and pillows should be replaced with cotton or kapok. The children should not be allowed to play around barns, poultry yards, slaughter pens, strawstacks, elevators, or gins.

"At the present time, there are at the command of the medical profession definite means of determining the cause of practically all cases of seasonal hay fever, and of a large per cent of those cases suffering from perennial hay fever and asthma. Modern methods of treatment, based on our knowledge of the cause, produce gratifying results in a large per cent of the cases, and, at the same time, prevent asthma.

"The prevention of asthma is exceedingly important from an economic standpoint, as such a disease interferes seriously with the carrying on of a gainful occupation.

"One other method of prevention must be mentioned, namely, the careful cutting of the weeds and grasses that grow in the back yards and on vacant lots in our cities. If the neighbor of a hay fever sufferer allows the weeds and grasses to grow in his back yard or on vacant lots owned by him, he is thereby allowing the air to become infested with poisonous pollens which increase the sufferer's symptoms.

"Most neighbors of a hay fever and asthma sufferer do not realize this fact, as many people do not know the actual causes of asthma and hay fever. However, the relation of pollen, dusts, and animal dander to asthma and hay fever is today as well established as the cause of malaria, typhoid, or smallpox.

"It is believed by many persons that the prevalance of hay fever is increasing, and the number of cases, according to available statistics, actually has increased. This increase is probably due partly to the fact that more people now live in the suburbs of cities than formerly. This brings them in closer contact with the cause of their trouble. The common use of the automobile also brings more people in intimate contact with enormous quantities of pollen.

"There is probably no disease that causes more discomfort and decreases more the ability of the sufferer to carry on a gainful occupation than do asthma and hay fever. Those persons affected surely have the right to demand that their health should not suffer as the result of their neighbors' neglect.

"Although State and municipal legislation requiring the cutting of weeds and grasses in yards and vacant lots would by no means solve the asthma and hay fever problem, it certainly would help.

"Along with the same legislation that many states and cities have provided for the destruction of certain weeds which are a detriment from the agricultural standpoint, there should also be included a provision for the elimination of those plants whose pollen is the chief cause of two of the most common of our nonfatal though distressing and disabling diseases—hay fever and asthma."

Survey of Clinics and Dispensaries Indicated Multiple Problems in Social Service, Medical Practice and Medical Economics

Rapid growth during the past few years of the clinic idea in medicine and public health work has added a complex and puzzling angle to the whole question of medical service.

Numerous studies have been made in attempts to ascertain the part that clinics—charitable, part-pay, industrial and commercial—play in the social structure of the community and their relationship to the broad and extensive subject of medical economics.

A special committee of the California State Medical Association recently completed an investigation of the clinic problem in that state. The facts, data and statistics obtained by that committee and the conclusions drawn in the summary of findings are interesting and apply in some measure to similar problems in every state, although the questions and problems studied by the California physicians were for the most part entirely local.

The report pleads for a more clear definition of clinic or dispensary and more standardization of the type of medical practice in dispensaries or clinics.

Regarding some "evils that regulate the number of clinics in a community", the report said:

"Religious organizations are vying with each other, and establishing competitive clinic groups in the same locality, which necessitates separate establishments, separate capital investments,

separate staffs, separate nurses, separate social service departments. Social groups, such as women's clubs, fraternal organizations, likewise establish health centers and clinics as part of their social welfare program and in order to justify their existence. Politics also is a factor in establishing unnecessary organizations and groups".

An interesting chapter of the report is devoted to the operation costs of clinics.

The California investigation shows that eighty-three cents of every dollar spent in the administration of charitable clinics in that state goes toward salaries of the personnel necessary to conduct the clinic, such salaries, however, do not include the doctors. Seventeen cents of the dollar is spent in rent, taxes, interest and incidentals. Medicines are sold at cost, laboratory work is done at cost and the services of the physicians are gratis, with the exception of those clinics run in connection with medical schools and government institutions where the doctors receive a salary for services rendered.

"One can easily see, then," the report points out, "from the above that, in order to pay doctors for services in charitable clinics, there must be a complete reconstruction of the economic administration of these clinics, or else there must be collected from the patients attending these clinics an additional sum of money necessary to pay the physicians adequately. Under the present methods of clinic administration this appears to be practically impossible, unless some solution or plan can be arrived at in order to cut down the tremendous overhead occasioned by a large administrative personnel."

Pleading for more interest on the part of the medical profession in the clinic problem and that the profession assume the lead in regulation of clinics, the report declared:

"The standard of medical practice as carried on in a great many clinics is not a credit to the medical profession. Because of lack of time and inadequate number of doctors attending the clinics, examinations are hurried, incomplete and inadequate records are kept. Because the service of the physician is volunteer, only those members of the profession are available who are able to give time from their practices. Many of the more desirable doctors of the community are therefore not available. If the clinics were required to give the highest type of recognized medical service to the patients attending them, then many of the poorly conducted small institutions would be forced to close their doors.

"The plea, then, would be to raise the standard of medicine in all of the charitable clinics of the State of California. The medical profession from time immorial has been the leader in matters of public health and public medicine. The clinic situation has grown so fast in late years that it is almost out of control, and unless the medical profession regulates the standard of medical practice for these institutions, then the social departments will regulate it for them."

White Ink Formula Suggested for X-Ray Films in Workmen's Compensation Cases

Pursuant to reading the article published in the August, 1930, issue of the *Ohio State Medical Journal*, Pages 699-700, relative to the new regulations in effect on *X*-ray films submitted by physicians in Workmen's Compensation cases, Dr. W. I. LeFevre, Cleveland, wrote *The Journal*, suggesting a formula for white ink that may be used by physicians in marking such films.

Dr. LeFevre says that the following formula produces a white ink that will not rub off easily and is easily made:

Barium sulphate, one and one-half teaspoonfuls.
Malted milk, one-fourth teaspoonful.
Glycerine, one-half teaspoonful.
Water, to make one fluid oz.
Rub the barium and malted milk to a thick paste with the glycerine, add the water to make one ounce. Keep in a corked bottle. Shake before using. Write with a stub pen.

As pointed out in the August issue of *The Journal*, all films and prints sent to the State Industrial Commission in Workmen's Compensation cases are being filed separately from other records in fire-proof cabinets in order to eliminate fire and explosion hazards. Thus the Medical Department of the Commission promulgated new rules to be followed by physicians who submit *X*-ray reports, namely:

1. Either films or prints of the films are acceptable.

2. If films are filed, the interpretations must be written on a separate sheet and the following data must be written in white ink on the films themselves:

a. The claim number.
b. The date of the *X*-ray examination.
d. Name of roentgenologist.

3. When films are filed with Form C-3 (medical only cases) before a number has been assigned, all of the above data except the claim number must be written on the film in white ink. The Commission will add the claim number after one has been assigned.

4. No bills for *X*-ray examinations will be paid without interpretation of either film or print.

5. Hereafter films will be returned to the sender unless these rules are followed.

Physicians treating Workmen's Compensation cases are urged to read, if they have not already done so, the analysis of this revision of procedure at the Commission published in the August *Journal*, as adherence to the new rules will facilitate prompt payment for *X*-ray work.

Welfare Advisory Committee Recommends Change in Probation and Administrative Procedure

A larger use of the adult probation system by local courts; a more liberal parole system; a modification of the practice of long-term minimum sentences, and extension of constructive methods of dealing with juvenile offenders were among the suggestions made recently to Governor Cooper's welfare advisory commission by State Welfare Director H. H. Griswold.

Director Griswold in a statement presented to the commission pointed out that Ohio will have 13,861 adult male prisoners in 1940 if the rate of increase remains the same as in the last 10 years, or 18,329 if the rate of increase is the same as in the last two eayrs.

Maintenance cost would be from $3,000,000 to $4,000,000 per year, based upon the present per-prisoner expense of $208 at the Ohio Penitentiary and $238 at the Mansfield Reformatory, Mr. Griswold stated. He also reported that present facilities in housing the penal population of the state, plus projected additions and improvements, would take care of only 12,650 if stretched to the limit of overcrowding.

Governor Cooper's commission is rapidly nearing the completion of its work. Rough drafts of the report that it will present to the governor and which he will use as a guide in recommending legislation to the Eighty-Ninth General Assembly are being drawn.

Among the recommendations that those who have closely followed the work of the commission believe the commission may make in its final report are:

1. Taking the appointment of the director of the State Department of Welfare out of the hands of the governor and placing it in the hands of a non-salaried revolving Board of Public Welfare, composed of seven members.

2. Development of the state-owned farm at Grafton to provide for a population of not more than 1250.

3. Erection of an entirely new penal institution within the next four or five years.

4. Erection of an institution for defective, delinquent, subnormal males at a place not yet decided upon.

5. The hiring of especially trained institutional help and increasing the wage scale to make it possible to obtain better employes.

6. To provide for the segregation at the Boys' Industrial School, Lancaster, of those who are first offenders from those considered worse type offenders.

7. Development of penal industries to cut down idleness.

8. Development of educational programs at the various institutions, including both academic and vocational branches.

9. Expansion of the state parole system, of the new division of classification and of the probation systems in the counties.

10. Repeal of the law that permits judges to fix the maximum sentence at any point between the statutory minimum and maximum, and revision of the law that provides for a 10-year minimum term in robbery cases.

Opposition Expressed to Additional Cabinet Departments

Considerable discussion has developed in recent months over proposed national legislation that would enlarge the President's cabinet and establish secretarships in several fields that are now represented at Washington by bureaus under existing cabinet departments.

One proposal would create a Department of Education with a secretary in the cabinet. Another would reorganize the U. S. Public Health Service so as to make its director a cabinet representative.

The desirability of increasing the size of the cabinet has been challenged and strong opposition to such a move has appeared, as evidenced by the following editorial published recently in the Columbus Dispatch:

"The medical profession has before it for consideration a proposition originating with the American Medical Editors and Authors association calling for a representative in the national cabinet. It should be made clear in the beginning that this idea is being fostered by this small group, with no expression, to date, from the majority of the profession.

"Just what the medics could hope to gain from such a scheme is not clear to us. Neither is it clear just what benefits the educators, who also are clamoring for such representation, hope to derive. When and if the clergy and the lawyers get the same bee in their bonnets, the puzzle will be deeper than ever.

"The medical profession is doing an excellent job as it is of guarding the nation's health, which is its prime purpose. It is receiving fine cooperation from the various governmental health agencies. We can see no advantage to the country whatever in the establishment of cabinet control of its health machinery. The nation's health, we believe, is perfectly safe in the hands of the profession, whose honesty, progressiveness and sincerity cannot be questioned.

"On the other hand, we would decry the mixing of politics with medicine, and we believe the majority of medical men would agree. Medical representation in the cabinet would lead inevitably to that very thing. In addition, our faith in the competence of the profession as a whole is such that we can see no need for governmental assistance beyond that already rendered in the matter of research. A 'secretary of health' is neither needed nor desirable from a number of viewpoints."

One Observer's Viewpoint of Hospital Administation and Distibution Costs

It has been conservatively estimated that at least 10 million persons in the United States pass through the hospitals of the country every year and that the average citizen may expect to visit some such institution once every 12 years, for a period of 12 days, the average length of stay in most hospitals.

Authorities who have made studies of the hospital field find that persons of all social groups are seeking hospital care in ever increasing numbers and that hospitalization is becoming an increasingly common corollary of illness.

Data collected on the medical service in the United States, including that rendered by the physician, the hospital and the nurse, clearly indicates that the hospital's part in administering to the needs of the sick and injured is becoming more and more prominent and that, therefore, its relation to the much-discussed question of cost of medical care must be carefully and thoroughly considered in all movements to bring about a readjustment .in the economic and social phases of medical service.

At the present time one of the outstanding issues before the hospital world, hospital authorities are frank to admit, is that which has to do with providing hospital care for persons of moderate means—those who belong to that large, although vaguely defined, group known as the middle class.

Hospitals throughout the nation are attempting to find some solution for the complex and confusing questions which have arisen from the necessity of providing for large numbers of patients who would not accept or are not eligible for charity service, but who find the rates usually charged for private service a severe drain on the funds which they have budgeted for necessities.

Although many who have surveyed present conditions are of the opinion that the reason for the predicament in which many middle-class families find themselves when sudden illness or injury occurs lies in the fact that too small a sum has been budgeted for medical services, thousands of hospitals are endeavoring to adjust their services to meet conditions as they exist.

Considerable data on the steps now being taken in the hospital field, which has been termed in a state of transition, has been collected by Dr. Niles Carpenter, Ph.D., a member of the research staff of the Committee on the Cost of Medical Care and recently published by the committee in booklet form as one of the series of reports being considered by the committee in its five-year survey.

The physical structure of the hospital is undergoing radical change, Dr. Carpenter declares, and the traditional clear-cut division of the hospital into a series of large open wards, on the one hand, and a number of high-priced private rooms, on the other, seems to be giving place to a graduated series of accommodations in some degree comparable to those found in a modern hotel. The large ward is still found, he says, but its more obvious inconveniences have been ameliorated, in at least a few institutions, by means of curtains and cubicles and by adjustments in administration. He also believes that the large ward no longer dominates the hospital scene, and that in some instances it has all but disappeared.

"The private pavilion remains—often more luxurious and expensive than before", he states. "But the single room is not necessarily or exclusively an expensive 'private' room. Single rooms are being attached to the wards of hospitals as necessary adjuncts to the care of very sick patients in those wards. Other single rooms and two-and three-bed semi-private rooms are being provided for those moderately well-to-do patients who desire and are able to pay for a modicum of privacy and for some of the privileges formerly applying only to expensive 'private' rooms. A new type of ward has appeared, the small four-to ten-bed ward which permits most of the economies ordinarily associated with ward service, but avoids many of the features that often characterized the large barrack-like ward of an earlier day."

However, Professor Carpenter declares that this change in hospital construction has penetrated only a small area of the hospital field and that a large portion remains relatively untouched by the effects of this change.

"As the situation now stands," he says, "such information as is available indicates that, in the general hospitals of the country at large, there are only a few more beds in semi-private rooms and small wards combined than in single rooms alone. The prices charged for single rooms are distinctly higher than those charged for semi-private rooms and small wards. This means that despite notable changes in the past few years—the hospitals of this country are relatively better equipped to serve well-to-do patients than they are to serve patients in moderate circumstances. In other words, the patients of medium economic conditions frequently find that the physical arrangements in his hospital are such that there is an actual shortage of the type of accommodations which he would normally expect to utilize and he must either enter a large ward or engage a private room. There is no question here of 'extravagance' or of 'the vanity of the great middle class'. The patients are often faced with the choice of the large ward, or the single room, or nothing."

Dr. Carpenter makes some interesting observa-

tions on the question of finances in the hospital field and shows that some hospitals are making headway in this phase of the question.

"When attention is turned to the prices charged for hospital service," he points out, "it is seen that at least two major elements of change are under way. First, an effort is being made to furnish patients of moderate means with hospital service at cost. A second and probably less significant element of change in connection with charges has to do with the so-called extra charges.

"It has been seen that, by and large, hospitals are not differentiating so closely between patients of different classes in the matter of special service charges as they are in the matter of basic duty rates. Hence the total bills of the patients occupying the less expensive types of accommodations are not as much smaller than the bills of patients occupying the more expensive types of accommodations as would otherwise be the case. Nevertheless, by various devices, the existing uneven and more or less arbitrary incidence of the burden of special-service charges is in some instances being equalized. In certain cases, the hospital incorporates these services into its general care and includes a charge for them in its basic daily rates. In others, payment for a number of related special services—particularly laboratory service—are lumped together in a flat-rate service charge.

"And in a few hospitals, notably in connection with obstetrical services, a special all-round flat-rate service charge, including bed, nursing care and 'extras', is made. In other words, hospitals are ceasing to be medical hotels and are becoming adequately equipped medical centers offering a number of facilities and procedures both to the physician and to his patient. All of these together make up the service which the patient requires or at least should have available and as a result the hospital rate structure is beginning to be modified."

Another interesting and important change which is taking place in hospital administration, Professor Carpenter believes, is the special financial arrangements that many hospitals are making with their patients.

"The hospital of yesterday divided its patients for the most part into full-pay patients on the one hand, and into part pay, or free patients on the other," he says.

"From the former it expected payments that were at least equivalent to the cost of their care, and moreover, it expected that these payments would be made promptly and in full. From the latter—that is the free or part-pay patient—it expected to receive little, if any, financial remuneration and arranged for such payments as were made, on the basis of expediency and of an often inexpertly, applied philanthropy. This situation still applies to a large number of American hospitals—probably to most of them when small institutions are taken into account.

"However, there is evidence that a new administrative theory is being brought into play. In these institutions recognition is now being made of the fact that hospital care is often an emergency which most patients cannot, or at least do not, provide for in advance. Various devices have been adopted to ease the financial burden of the patient in such circumstances and at the same time assure to the hospital as large a financial return as can properly be expected. It is particularly significant that, in such hospitals, adjustments of this kind are no longer being limited to members of the so-called poverty groups. It is, perhaps, even more significant that the hospital world is beginning to be affected by one of the major economic phenomena of the current period —to wit, the systematic practice of credit extension by means of installment payments."

Professor Carpenter also believes that a change is under way pointing to closer cooperation between the physician and the hospital in their relations with the patient.

"In some cases, the fee which the physician charges to his less well-to-do patients is explicitly limited", he declares.

"In others, there is an informal understanding between hospital and physician to much the same effect. In a few cases, the hospital acts as agent for the physician in collecting his fees from his patients. The general import of all these arrangements appears to be that there is a slowly crystalizing recognition that the interests of hospital, physician and patient are best served where the patient's total financial outlay for his illness is considered as an economic unit and where some kind of agreement exists between all three parties concerning its amount and distribution."

Dr. Carpenter concludes a summary of his study by asking the question: "Could the patient of moderate means pay for his hospital care, even if the entire hospital world should adopt every one of the new policies outlined in this study?"

Indirectly answering his own query, Professor Carpenter declares:

"Some hospitals, at least, believe that he can and have set out to give him service on this assumption."

Admitted to Practice Through Reciprocity

The following have been granted licenses by the State Medical Board to practice medicine and surgery in Ohio through reciprocity: Leon J. Malock, Toledo, George Washington University; Alexander N. Johns, Toledo, University of Michigan; Gerald S. Shibley, Cleveland, College of Physicians and Surgeons, and Cyrus Rogers Wood, Toledo, University of Louisville.



Edgar Vernon Berry, M.D., Newcomerstown; Ohio Medical University, Columbus, 1903; aged 54; former member of the Ohio State Medical Association; died July 21 of heart disease. He had practiced in Newcomerstown since 1915. His widow and two daughters survive.

Stowell Nelson Brown, M.D., Akron; Ohio State University College of Medicine, Columbus, 1925; aged 30; former member of the Ohio State Medical Association and Fellow of the American Medical Association; died July 24. He had practiced in Akron since graduation.

Orrillus M. Corson, M.D., Middletown; Medical College of Ohio, Cincinnati, 1879; aged 78; former member of the Ohio State Medical Association; died at Middletown hospital, July 10, from the result of a fall at his home on July 4. Dr. Corson retired nine years ago, after practicing in Middletown and Butler County since his graduation. He is survived by his widow and three sons.

J. A. Clark, M.D., Bellaire; Columbus Medical College, 1881; aged 73; member of the Ohio State Medical Association and Fellow of the American Medical Association; died July 18 after an illness of two years. Dr. Clark practiced at Glencoe for 17 years, and in Bellaire for the past 30 years. His widow and one daughter survive him.

David Davis, M.D., Venedocia; Eclectic Medical College, Cincinnati, 1885; aged 73; died July 18 after a long illness. He is survived by his widow and two sons.

William S. Eakman, M.D., Ironton; Miami Medical College, Cincinnati, 1881; aged 77; former member of the Ohio State Medical Association and Fellow of the American Medical Association; died June 12 from burns received when his clothing ignited from a gas stove. Dr. Eakman had practiced in Lawrence County for more than 50 years. He was a member of the Ironton Board of Education for more than ten years, and was active in other civic affairs. He is survived by one brother.

Charles W. Eckermeyer, M.D., Montgomery; Eclectic Medical College, Cincinnati, 1878; died July 11 of heart disease. Dr. Eckermeyer had practiced in Montgomery and Hamilton County for more than 50 years. He is survived by two sons and a daughter; two sisters, Dr. Kate Astler and Mrs. William Brueggeman, of Elmwood.

Arthur H. Freericks, M.D., Cincinnati; Miami Medical College, Cincinnati, 1896; aged 64; died July 20 of paralysis. Dr. Freericks served his internship at the old Cincinnati Hospital, and for 33 years had practiced in Walnut Hills. Surviving him are his widow, one daughter, and a brother.

Frank H. Hurd, M.D., Hiram; Miami Medical College, Cincinnati, 1872; aged 79; died July 26 at Cleveland clinic of uraemia. Dr. Hurd started in practice in Morgan county with his great uncle, the late Dr. W. Hurd, and later moved to Hiram. He is survived by his widow, a daughter, Mrs. Lois Nichols, and two sons, Edgar, and Dr. Harry Hurd, of Hiram.

Ephraim M. Ilgenfritz, M.D., Youngstown; Eclectic Medical College, Cincinnati, 1878; aged 74; died July 3. He had practiced in Youngstown since his graduation. Surviving him are his widow and one brother.

James W. Kelly, M.D., Bellville; Cleveland University of Medicine and Surgery, Cleveland, 1882; aged 75; died July 15. After practicing for three years at Bucyrus, Dr. Kelly took post graduate work at the New York Post Graduate Medical College, and returned to his boyhood home of Bellville, where he practiced until his death. He is survived by three daughters.

Maurice Leahy, M.D., Tiffin; University of Wooster, Medical Department, Cleveland, 1878; aged 77; member of the Ohio State Medical Association and Fellow of the American Medical Association; died July 19 of angina pectoris. Dr. Leahy, a native of Ireland, had practiced in Tiffin over fifty years, except for short periods spent at Bellevue Hospital College of Medicine in 1883 and at the New York Post Graduate Medical School in 1899. Dr. Leahy was the oldest practicing physician in Seneca County, and the golden jubilee of his entrance into the profession was observed a year ago by the Seneca County Medical Society. Surviving him are two sons, Dr. T. Maurice Leahy of Milwaukee, and Dr. Paul Leahy of Tiffin.

Frank Riecker Lyne, M.D., Chagrin Falls; Western Reserve University School of Medicine, 1922; aged 32; member of the Ohio State Medical Association and the American Medical Association; died July 19. Dr. Lyne served his internship at Lakeside Hospital, and at the time of his death, he was pathologist at Lutheran Hospital, Cleveland, in addition to his private practice at Chagrin Falls. He is survived by his widow, one daughter; his parents, Dr. and Mrs. G. L. Lyne, and a sister, all of Medina.

Walter E. Murphy, M.D., Cincinnati; Miami Medical College, Cincinnati, 1897; aged 58; member of the Ohio State Medical Association; Fellow of the American Medical Association; member of the American Academy of Ophthalmology and Oto-Laryngology; died August 4 of heart disease. He was professor of otology at the University of Cincinnati, chief of staff of the Children's Hos-

pital; chief otologist at the General Hospital and a member of the staff of Good Samaritan and Deaconess Hospitals. Besides his widow, he is survived by two brothers and two sisters.

John King Scudder, M.D., Cincinnati; Eclectic Medical College, Cincinnati, 1888; aged 65; died July 29 of heart disease. Dr. Scudder for 30 years was secretary and treasurer of the Eclectic Medical College; publisher of the *Eclectic Medical Journal*, and since 1896, a member of the Ohio State Medical Board. He is survived by his widow, one son, two brothers and a sister.

William T. S. Sims, M.D., Columbus; Columbus Medical College, 1892; aged 64; died July 24 at Grant Hospital, following an operation for appendicitis. Dr. Sims practiced for nine years at Lewis Center before locating in Columbus. He is survived by his widow, two sons, two daughters; four brothers and five sisters.

Relative Chances of Marriage and Death

Charts showing the chances of persons marrying within a given period and dying before the end of that period, with the result that a surviving widowed wife or husband, and perhaps orphaned children, may be left behind, have been formulated from available statistics by the Metropolitan Life Insurance Company.

The study shows that, for example, a young man, single and 25 years of age, has seven chances in a thousand of being married and dying within five years and thus leaving his wife a widow and perhaps with dependent children. Extending the period from five to ten years increases the chances to two in a hundred, the charts reveal. A period of fifteen years makes the chances five in a hundred; and within twenty years the chances of his being married and dying are seven per cent.

Similarly, a single young woman, 25 years of age, has seven chances in a thousand of marrying and dying within five years, over two chances in a hundred within ten years, four within fifteen years, and over six in a hundred within twenty years, the study discloses.

In analyzing the figures in a more detailed way, the report of the company said:

"In considering these figures, and others of the same kind which can be read from the charts, it is to be remembered that the chance of marrying and dying within a specified period of years is a compound probability. For a young person, the chance of marrying is relatively high, and the chance of dying in a few years relatively low. At the higher ages, say, 45 years, the chances of marriage within a given number of years, are much reduced, but the chances of dying become greater and ultimately approach unity, that is certainty, as the period of years is increased."

Use of Diphtheria Immunization Especially Timely Now

Reopening of the public schools of Ohio during September suggests a check-up on the physical condition of children, especially those entering the lower grades.

In many Ohio cities during the past summer, physicians have been called upon for examinations among school children and also among preschool youngsters.

Much work has been done in many communities, as attendance records of later months will undoubtedly reveal.

Ohio has gained special prominence throughout the country for its enviable record in immunization against diphtheria. Physicians and public health authorities have waged a most successful battle during the past decade in controlling and cutting down the mortality and morbidity rates of this disease, which is especially dangerous to children.

Immunization against diphtheria when translated into terms of dollars and cents has been responsible for an enormous saving to Ohio during the past few years.

Hypothetical statistics are of course not foolproof but for the sake of emphasizing the important part that immunization against diphtheria has played in the economic life of the state since 1921, assume that every case of diphtheria costs approximately $100, that the cost of rearing a child to an age where it is most likely to die from the disease has been $1000, and that the average economic value of a child succumbing to the disease is $7500.

These arbitrary figures are undoubtedly quite low, but they serve the purpose of showing the immense saving to Ohioans resulting from energetic immunization campaigns.

In 1921, there were 17,847 cases of diphtheria reported to the State Department of Health. 1075 of which resulted in death. The great majority of the victims were children.

On the basis of the figures cited above, the diphtheria loss to the citizens of Ohio in that year was: $1,784,700 in medical and nursing services; $1,075,000 that it cost to rear the children to the age when they died, and $9,107,500 that represents the economic value of the children who succumbed—a total of $10,892,200.

In 1929, there were 3130 cases of diphtheria reported to the State Department of Health, with 225 deaths. Using the same figures, it is revealed that the total loss last year due to diphtheria was $2,225,500.

Comparison of the figures for the years 1921 and 1929, shows a decrease in monetary loss of $8,666,700.

Widespread use of toxin-antitoxin in Ohio during the past nine years has produced considerable results.

NEWS NOTES of OHIO

Cleveland—Cleveland's golfing physicians defeated Akron physicians in two matches, one played at the Portage County Country Club and the other at the Westwood Club, Cleveland.

Cleveland—Dr. N. C. Wetzel has been promoted to assistant professor of pediatrics on the faculty of the School of Medicine, Western Reserve University, instead of assistant professor of gynecology, as erroneously announced in the last issue of *The Journal*.

Barberton—Offices have been opened here by Dr. W. R. Portz who recently completed his internship at the Akron City Hospital.

Cleveland—A camp for diabetic children has been opened on the rural estate of Dr. Henry J. John of the Cleveland Clinic.

Columbus—Dr. and Mrs. Alfred B. Lippert were injured recently when their auto was sideswiped near Logan. Dr. Lippert is chief of the division of health education, State Department of Health.

Cleveland—Announcement has been made of the marriage of Miss Elizabeth Cole and Dr. Howard C. Eddy, both of Cleveland. Dr. Eddy is on the staff at Lakeside Hospital.

Cleveland—Dr. C. J. Wiggers represented Western Reserve University at the medical meetings held in connection with the celebration of the 100th anniversary of Belgian independence in Brussels.

Cleveland—Dr. W. E. Bruner will be one of the guest speakers before the Eye, Ear, Nose and Throat Section of the Pennsylvania State Medical Association at its annual meeting to be held at Johnstown in October.

Cleveland—Dr. W. L. Fox has been promoted to the rank of lieutenant colonel in the Medical Reserve Corps, U. S. A.

Cleveland—Dr. Oscar Eisinger is attending medical clinics at Vienna.

Akron—Announcement has been made of the marriage of Miss Janice Peck, Clarksburg, West Virginia, and Dr. George Lind Hardgrove of Akron.

Wooster—Dr. Vincent C. Ward, until recently an intern at the Akron Children's Hospital has opened offices for general practice here.

Ravenna—Offices for general practice have been opened here by Dr. Harris C. Wendorf, formerly of Columbus.

McConnellsville—Dr. Frank Lande, who has been resident physician at the Rocky Glen sanatorium, has resigned to accept a position as a district physician under the Cincinnati Department of Health.

Dayton—Dr. Charles D. Padan was bound, gagged and robbed of $350 by two bandits who entered his office.

Celina—Offices for general practice have been opened here by Dr. W. C. Scheidt, formerly an intern at the Youngstown City Hosiptal.

Kent—Dr. E. H. Kauffman, formerly on the staff of St. Luke's Hospital, Cleveland, has opened offices here.

Alliance—Principal address of the eighth annual meeting of the local Jefferson County Association was made by Dr. John M. Van Dyke of Canton.

Fayette—Dr. Ralph Reynolds has entered Harvard Medical School for a four-months postgraduate course.

Cincinnati—Dr. J. Edward Pirrung has returned from a five-months trip through Europe.

Toledo—Dr. W. W. Beck has been elected president of the Sylvania Golf Club.

Ashtabula—Dr. A. A. DeCato, graduate of Jefferson Medical College has opened offices here.

Bucyrus—Dr. E. H. Porter, Tiffin, spoke to the Bucyrus Rotary Club recently on his three-months trip through Europe.

Ironton—Dr. Ralph Massie is attending ear and throat clinics in Philadelphia.

Cincinnati—Dr. Elmore B. Tauber is visiting European medical centers. Dr. Tauber was elected chairman of the Section on Dermatology of the American Medical Association at the recent annual meeting of the A.M.A. in Detroit.

Second Councilor District Meeting

The annual meeting of the Second Councilor district will be held at Dayton on September 24, 25 and 26, 1930. The officers have succeeded in obtaining an unusually fine group of lecturers for the meeting. On the first day the speakers will be Dr. George Crile, Cleveland, and Dr. Stewart Roberts, Professor of Medicine, Emory University, Atlanta, Georgia. The lectures on the second day will be given by Dr. Stewart Roberts and Dr. J. L. McCord, Professor of Obstetrics, Emory University. On the third day the program will be divided between Dr. Walter C. Alvarez, of the Mayo Clinic, and Dr. Willis C. Campbell of Memphis, Tennessee.

All members of the Ohio State Medical Association are cordially invited to attend this course of lectures. The subjects to be discussed will be presented primarily from the viewpoint of the general practitioner. The enrollment fee of ten dollars will include attendance at the lectures, luncheon each day and a banquet on Friday evening, September 26. All those who wish to enroll for the course of lectures are urged to communicate with Dr. H. R. Huston, Secretary, 60 Wyoming Street, Dayton.

Program for Fifth District Meeting in Cleveland September 19

A symposium on "The Medical Problems of Old Age" will feature the annual meeting of the Fifth District, Ohio State Medical Association, to be held at the Allen Memorial Medical Library, Euclid Avenue and Adelbert Road, Cleveland, Friday, September 19.

Many physicians from Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Medina and Trumbull counties, comprising the Fifth Councilor District, and neighboring districts, are expected to attend the all-day meeting which will consist of a morning session, an organization luncheon at noon, two afternoon sessions and a joint session with the Cleveland Academy of Medicine in the evening.

Physicians planning to attend the noon luncheon are requested to send their names to the Cleveland Academy of Medicine as soon as possible so that reservations may be made.

The following program for the annual event has been drafted under the direction of Dr. C. L. Cummer, Cleveland, Councilor of the Fifth District:

MORNING SESSION

11:00 A. M.

Menopausal and Post-menopausal Condition in Women	W. H. Weir, M.D.
Pneumonia in the Aged	L. W. Ladd, M.D.
Diabetes in the Elderly	C. D. Christie, M.D.
Arthritis and Old Age	T. A. Willis, M.D.
Spinal Cord Disease in the Aged	H. H. Drysdale, M.D.
Genito-urinary Disease and Old Age	W. E. Lower, M.D.

ORGANIZATION LUNCHEON

12:30 P. M.—Dining Room, Allen Memorial Medical Library

FIRST AFTERNOON SESSION

1:30 P. M.

Old Age in Industry	A. G. Cranch, M.D.
Dietetics in Old Age	R. W. Finley, M.D.
Diseases of the Skin in Old Age	C. G. LaRocco, M.D.
Psychoses in the Aged	Louis Karnosh, M.D.
Bronchitis and Asthma in the Aged	Lester Taylor, M.D.
Anatomical Consideration in Old Age and the Process of Aging	T. Wingate Todd, M.D., Prof. of Anatomy, W. R. U.

Recess for Visit and Smoke

SECOND AFTERNOON SESSION

3:15 P. M.

Syphilis in Elderly Persons	E. W. Netherton, M.D.
Nephritis in the Aged	M. A. Blankenhorn, M.D.
The Heart after Forty	R. W. Scott, M.D.
Diseases of the Eye in Old Age	W. E. Bruner, M.D.
Traumatic Surgery and the Problem of Age	D. M. Glover, M.D.

EVENING SESSION

Joint meeting with Cleveland Academy of Medicine, 8:15 p. m.

Program to be completed later.

The Academy of Medicine of Lima and Allen County Post Graduate Lectures

W. McKim Marriott, M.D., of St. Louis, will lecture on September 15, 1930, at 4:30 P. M., at the Academy Rooms. "Practical Points in the Care and Feeding of Infants". "Recent Investigations on the Nature and Treatment of Nephritis". Sept. 16, 1930, at 4:30 P. M., at the Academy Rooms. "The Clinical Application of Recent Studies Concerning Chemical Equilibrium in the Body".

(This includes a discussion of Acidosis, Alkalosis and Anhydremia).

"The Application of Specific Measures in the Prophylaxis and Treatment of Infectious diseases".

Charles Louis Mix, M.D., of Chicago, Ill., will lecture on Sept. 17, 1930, at 4:30 P. M., and 8:30 P. M., at the Academy Rooms.

"Diagnosis of Cardiac Diseases".

A. The Rheumatic Heart.
B. The Symphatic Heart.
C. The Renal Heart.
D. The Arteriosclerotic Heart.

Sept. 18, 1930, at 4:30 P. M. and 8:30 P. M., at the Academy Rooms.

"Diagnosis of Upper Abdominal Diseases.

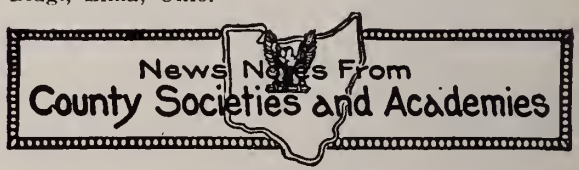
A. Gastric and Duodenal Ulcer.
B. Gall-Bladder Diseases.

Sept. 19, 1930, at 4:30 P. M. and 8:30 P. M., at the Academy Rooms.

"The Kidney and Diagnosis of Renal Diseases".

"Diagnosis of Central Nervous Diseases, especially the Spinal Cord.

Better not miss this. Mail your check for $10 00 to Edward B. Pedlow, M.D., 410 Steiner Bldg., Lima, Ohio.



First District

Highland County Medical Society met at Leesburg on Wednesday, August 6. "The Management of Stomach and Duodenal Ulcer", was the subject of an address by Dr. Joseph L. DeCourcy of Cincinnati.—News Clipping.

Third District

The annual meeting of the Tri-County Medical Society, composed of members of Mercer, Paulding and Van Wert County Medical Societies, was held at the Willow Bend Country Club, Van Wert, on Tuesday, July 1. The program, furnished by members of the staff of University Hospital, Columbus, was as follows: "Urinary Calculi", by Dr. W. N. Taylor; "Surgical Aspect of 108 Fibroid Uteri", by Dr. Philip J. Reel; "Fractures", by Dr. Harlan Wilson; "The Hormone Diagnosis of Pregnancy", by Dr. H. L. Reinhart; "The Clinical Aspect and Treatment of Coronary Disease", by Dr. G. I. Nelson; "Pathology of Coronary Occlusion", by Dr. Ernest Scott. Officers elected for the coming year are: President, Dr. John T. Gibbons, Celina; vice-president, Dr. Ernest Kohn, Grover Hill; secretary-treasurer, Dr. A. T. Rank, Van Wert. The retiring officers were Dr. Roland H. Good, president and Dr. Paul S. Fishbaugh, secretary-treasurer, of Van Wert. —News Clipping.

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PROMPT AND FULL REPORT

Fifth District

Lake County physicians held their regular monthly staff meeting at the Lake County Memorial Hospital, Painesville on Monday, July 14, with Dr. J. V. Winans, presiding. The program consisted of a presentation of the following cases: 1. Erysipelas of the Leg Treated by Ultra Violet Irradiation; Recovery, by Dr. F. J. Dineen. 2. Meningococcic Meningitis, by Dr. M. H. Carmody. 3. Strangulated Inguinal Hernia with Incarcerated Undescended Testicle, by Dr. E. L. Haffner.—F. J. Dineen, Secretary.

Lorain County Medical Society held its annual outing on the afternoon and evening of August 1 at the Spring Valley Country Club. A dinner at 6:30 followed an afternoon of golf. Dr. Clyde L. Cummer, Cleveland, Councilor of the Fifth District, was the speaker of the evening.—Bulletin.

Sixth District

Mahoning County Medical Society held its annual picnic and golf championship on Thursday afternoon, July 17 at Squaw Creek Country Club.—Bulletin.

Seventh District

The annual meeting of the Seventh Councilor District was held at the East Liverpool Country Club, Friday afternoon, July 11, with an attendance of 150, including members, their wives and friends. Dr. C. W. Kirkland, Bellaire, was toastmaster at the banquet. Rabbi I. E. Philo, Youngstown, spoke on "International Peace". Speakers at the afternoon session were Dr. George W. Crile, Cleveland, Dr. Norman C. Oschsenhirt, Pittsburgh, and Dr. W. S. Fulton, of Wheeling. Steubenville was selected for the 1931 meeting. Officers elected were: President, Dr. A. E. Weinstein, and Secretary, Dr. Carl Goehring, Steubenville.—News Clipping.

Eighth District

Perry County Medical Society met at the Park Hotel, New Lexington, on Monday, July 21. Dr. Arthur Helmick, Columbus, was the visiting essayist.—News Clipping.

CIVIL SERVICE POSITIONS

The United States Civil Service Commission has announced the following competitive examinations of interest to the members of the medical profession:

Senior Medical Officer (Pathology), $4,600 to $5,400 a year. Associate Medical Officer (Pathology), $3,200 to $3,800 a year.

Applications for these positions must be filed with the Commission at Washington not later than Sept. 24. Competitors will not be required to report for examination but will be rated on their education and training, and on their experience.

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PUBLIC HEALTH NOTES

Responsibility for the support and operation of the Diagnostic Chest Clinics that have been set-up and operated in 72 counties of the State under the auspices of the State Department of Health has been relinquished by the State Department and turned over to local health authorities, according to an official announcement of the State Department of Health.

The official statement on this change of policy by the department, published in a recent issue of the *Ohio Health News*, reads as follows:

"The Ohio Department of Health has been conducting Diagnostic Chest Clinics in the various cities and counties of Ohio since 1921. During this period, 72 of the 88 counties of the state have been given this service. One hundred and forty-two clinics have been held, at which approximately 10,000 patients have received examination.

"The purpose of these clinics is educational, in that they are intended to arouse public interest to the necessity of control of tuberculous infection, and to the need of early diagnosis and early treatment in the arrest of the infection and disease.

"That medical ethics have not been violated in conducting clinics is shown by the fact that the Bureau of Tuberculosis has been asked to return to the counties in which they were held, returning

"Six times in one county.
"Five times in three counties.
"Four times in three counties.
"Three times in 13 counties.
"Two times in 18 counties.
"One time in each of 34 counties.

"The value of the educational work thus carried on is evident, and, undoubtedly, has entered largely into the lowering of Ohio's death rate from tuberculosis.

"These clinics have passed the experimental stage; each one has demonstrated the fact that new cases will be found if carefully sought. The soundness of the clinic idea as a clearing house is definitely established. The Ohio Department of Health now feels that the time has come when the districts previously served should assume the responsibility of conducting such preventive work.

"Tuberculosis is placed in Class A as a communicable disease. Health boards are charged with the duty of making a study and recording the prevalence of disease within their districts, and to provide for the prompt diagnosis and control of communicable diseases. Provision for the expense of such work, on the part of health districts, should be made in the budget for the work of the year.

"That such provision for this work must be made is evident to the Department of Health by the increased demands made upon it for clinics, and by the increasing difficulty it has in providing the necessary service that they may be properly conducted.

"Districts not previously served, and others not making sufficient progress in tuberculosis control and in need of assistance in the work are the ones into which the service is to be directed in the future, and local boards of health should note this announcement of policy very carefully, and make proper budget provisions with which to carry on."

Two hundred and eleven cases of carbon monoxide poisoning, 87 of which were fatal, were re-

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87 ADDRESSES

ported to the State Department of Health during the year July 1, 1929, to June 30, 1930, according to a report compiled by the Division of Industrial Hygiene.

There were 127 cases caused by gas heating appliances, compared to 168 in the preceding year, the report states, but the number of fatalities due to this cause was 52, an increase of 11 over the preceding 12 months.

There were sharp increases in both poisonings and fatalities due to carbon monoxide in automobile exhaust fumes, with 84 cases and 35 deaths during the year ending June 30, 1930, and 63 cases and 28 deaths in the preceding year. There were three suicides and one attempted suicide in the 1929-1930 record compared with two suicides in the 1928-1929 tabulation.

Analyzing the figures and pointing out that people are still tolerating unvented stoves without much thought as to the consequences, the report says:

"The adequate ventilation of all gas-heating appliances as recommended by the Ohio Public Health Council will eliminate virtually all hazards. The removal of heaters from bedrooms and water heaters from bathrooms should be demanded. There is no necessity for them in either location. While ovens in kitchen ranges are often vented, burner tops are not. The latter should never be turned high enough for the flame to appear around an object placed over the burner, especially when that object is cold. When in active operation, kitchens should always be ventilated through transoms or open doors to allow egress of fumes not otherwise controlled."

Commenting on the cases resulting from automobile exhaust fumes, the report declared:

"Auto exhaust gases are so insidious that individuals are overcome before they realize their danger. No chances should be taken. No automobile or gas engine should be run in a confined space without adequate ventilation or the removal of fumes by other means."

—Changes have been announced by the State Department of Health in the record system of the Bureau of Morbidity Statistics, as follows: (1) All case cards will be counted according to 'date of report' if received before the 10th of the following month. Thereafter 'date of report' will be changed to the current month and cards counted accordingly for the report to the U. S. Public Health Service.

(2) In all instances where case cards do not agree with the case summary received from the health commissioner, the case card count will be taken as official in preference to the summary.

Commenting on the revision of the system, the *Ohio Health News* said:

"The new Hollerith system, being installed, requires all cards to be numbered on the reverse side and since statistics are being taken from the

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Further details in relation to this subject and a supply of samples of Mellin's Food sent to physicians upon request.

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cards for 1930 at the present time, it will be impossible to place late cards in their proper place and month if they are received late (after the tenth). At this time case cards are counted for the monthly report and late cards will be changed to the current month. Cooperation on the part of the local health commissioner by sending cards in promptly or changing them to the current month before sending them in is urged, so that local records may check with the records of the State Department of Health."

—Northwestern Ohio Society of Sanitarians held its regular summer meeting at Camp Perry, August 6. More than 50 health workers attended the gathering.

—Final reports of the investigations conducted by the White House Conference on Child Health and Protection will be made at a general session, November 19-22, in Washington, D. C., Secretary of Interior Wilbur, chairman of the conference, has announced.

—A gift of $100,000 by the Chemical Foundation, Incorporated, to the newly-created National Institute of Health has been announced.

—There has been a steady increase in the number of cases of meningococcus meningitis during the last five years, and during the first two months of 1930, according to a statement issued by the Public Health Service. In March, however, the graph for the 1930 incidence fell below that of a year ago, it was stated.

It is significant that each year, during the last five years, there has been an increase over the preceding year, it was pointed out, and last year the number of cases of this meningitis was larger than the combined total of the two preceding years. The nomenclature has been changed several times, the disease having been variously designated as cerebrospinal meningitis, epidemic meningitis, and other similar terms, so earlier figures are not comparable with the latter ones, it was explained.

The rise in incidence of this type of meningitis during the last five years has been accompanied by sharp local outbreaks in various parts of the country, it was said, and the death rate in most of these outbreaks has been relatively high.

Although there have been considerable differences in the incidence of this meningitis in various parts of the country, and also wide fluctuations in the number of cases reported in the same States at different times, yet the increase in the prevalence of the disease since 1925 has extended to all sections of the country, it was said.

Incomplete reports for the first three months of 1930 show rates higher than normal in England, Wales, Scotland, The Netherlands, and Poland, but no figures have been found from Europe that indicate a general increase of the disease comparable with that in the United States, it was revealed.

During the first 22 weeks of 1930 5,400 cases of meningococcus meningitis were reported to the Public Health Service by 47 States, compared with 5,900 cases in the same period of last year, but in 1928, the same States reported only 2,800 cases, it was shown. In general, the States which reported considerable numbers of cases of this disease during the first five months of last year show decrease prevalence this year, it was stated, but some States, which in previous years had comparatively few cases, report decided increases in the prevalence this year.

—More physical examinations were conducted by medical examiners of the Aeronautics Branch of the Department of Commerce during the fiscal year 1930 than in all other years combined, it was announced by the Assistant Secretary of Commerce for Aeronautics, Clarence M. Young.

There was a 54 per cent increase over the previous fiscal year and the total for the five-year period was brought up to 81,349, it was stated.

A total of 22,606 students received their first physical examinations for pilots licenses during the fiscal year 1930. Also, 18,595 reexaminations were given. Under the classification of reexamination come students whose examinations had expired before the completion of the course as well as the examination of licensed pilots for renewal of licenses. Original physical examinations were given to 2,435 individuals who had been flying as unlicensed pilots.

Of the total of 43,902 examinations made in the fiscal year 1930, 25,041 were of individuals taking their first examinations for pilots' licenses, including both students and trained pilots. Of 22,606 original physical examinations of students, 1,435 were disqualified from receiving student

CLASSIFIED ADVERTISEMENTS

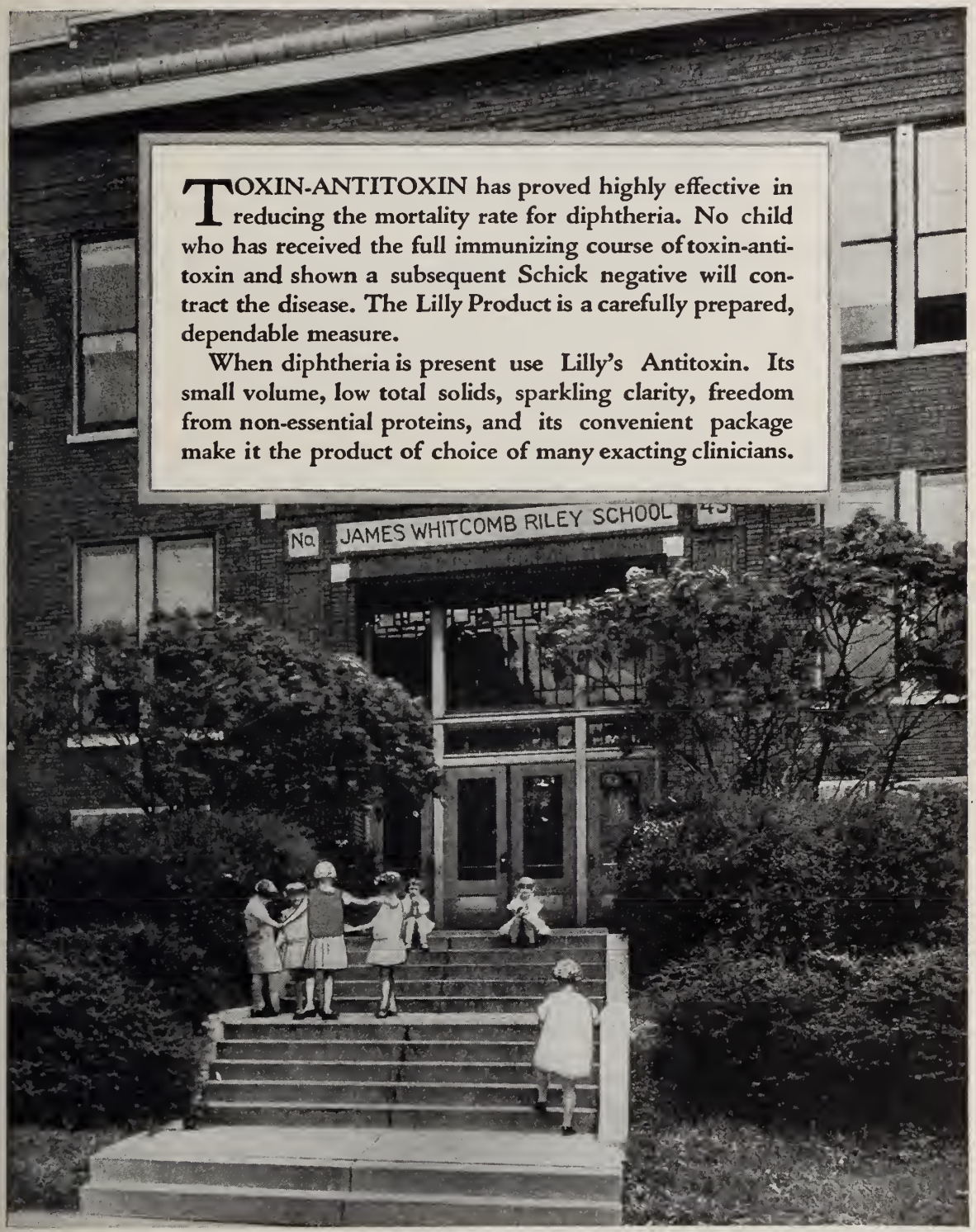
Rates for advertisements under this heading are 50 cents per line, payable in advance. Minimum charge of $1.00 for each insertion. Price covers the cost of remailing answers. Forms close 16th of the month preceding publication.

Situation Wanted—Salaried appointments for Class A physicians in all branches of the medical profession. Let us put you in touch with the best man for your opening. Our nation-wide connections enable us to give superior service. Aznoe's National Physicians' Exchange, 30 North Michigan Chicago. Established 1896. Member of Chicago Association of Commerce.

Speeches, special articles, papers on special subjects, prepared from the latest data and authorities, for busy physicians. Prompt service extended at reasonable rates in an expert manner to your requirements. Authors' Research Bureau, 516 Fifth Ave., New York.

For Sale or Rent—Eight room brick, office rooms combined, 15th Ave., opposite O. S. U. Campus, formerly a physician's home. Address Mrs. J. L. Gordon, 250 19th Ave., Columbus, Ohio.

For Sale—Good, unopposed location for general practice. Good town, good farming country, improved roads. Address M. J., care *Ohio State Medical Journal.*



TOXIN-ANTITOXIN has proved highly effective in reducing the mortality rate for diphtheria. No child who has received the full immunizing course of toxin-antitoxin and shown a subsequent Schick negative will contract the disease. The Lilly Product is a carefully prepared, dependable measure.

When diphtheria is present use Lilly's Antitoxin. Its small volume, low total solids, sparkling clarity, freedom from non-essential proteins, and its convenient package make it the product of choice of many exacting clinicians.

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Official Registries for Nurses

District No. 1—42 Hawthorne Ave., Akron, Ohio. Phone: Lincoln 0600
District No. 3—149 Hollywood Ave., Youngstown, Ohio. Phone: 2-1171
District No. 4—2157 Euclid Ave., Cleveland, Ohio. Phone: Prospect 1951
District No. 8—Room 1112 Chamber of Commerce Bldg., Cincinnati, Ohio Phone: Main 7142
District No. 9—1930 Robinwood Ave., Apartment 40, "The Scotwood," Toledo, Ohio. Phone: Main 7962
District No. 12—398 N. Garfield Ave., Columbus, Ohio. Phone FAirfax 3615
District No. 15—Portsmouth General Hospital, Portsmouth, Ohio. Phone: 559

permits to fly. The number of pilots and students reexamined for the same grade of license which they held prior to the time of examination totaled 12,402. Out of this number, 100 were disqualified. Of the total of 6,193 reexaminations for a higher grade of license, 19 were disqualified.

HOSPITAL NOTES

—Several hundred persons attended the formal opening of the new Swan Hospital, Cambridge.

—A rededication program was given at the opening of the remodeled Gates Hospital for Crippled Children, Elyria.

—Samaritan Hospital, Ashland, received a gift of $30,000 under the will of the late Judson M. Norris.

—New power house and laundry building have been completed at the Jewish Hospital, Cincinnati.

—Improvements costing $4,000 will be made at the Mt. Logan Scioto County sanitarium.

—A new campaign for the erection of a tuberculosis hospital in Butler County has been launched.

—The common pleas court of Hamilton County has been petitioned by officials of Christ Hospital for permission to borrow $1,600,000 to be used in improvements at the hospital.

—At the recent dinner given by the staff of the Akron City Hospital in honor of the board of trustees, Dr. J. H. J. Upham, Columbus, was the principal speaker.

—Resignation of Miss Susan E. Emmott as superintendent of the Salem Hospital has been accepted by the board of trustees.

—Newly-selected members of the physicians' advisory committee of the Middletown Hospital are: Dr. J. C. Stratton, Dr. E. O. Bauer and Dr. C. T. Atkinson.

—George W. Wilson, formerly superintendent of the Hamod Hospital, Erie, Pa., has succeeded John Ransom as head of the Toledo Hospital.

—Part of the Mt. Vernon Hospital-Sanitarium will be razed and a new addition built, making the structure three stories high with a bed capacity of 50.

—Miss Elizabeth Woolsen, formerly assistant superintendent of the Barberton Hospital, has been named superintendent of the new Shelby County Wilson Memorial Hosiptal.

—Miss Helen Rein, Cincinnati, has succeeded Miss Irma Reineck as assistant superintendent of the Fremont Memorial Hospital.

Cooperation on Problems of Medicinal Liquor

An advisory committee of 15 members has been selected by Dr. James M. Doran, national commissioner of alcohol supervision and director of the U. S. Bureau of Industrial Alcohol, to "promote a better understanding and bring about closer contact with various scientific, professional and trade organizations concerned with the manufacture, distribution and use of alcohol and liquors for industrial and medicinal purposes".

This advisory committee, Dr. Doran pointed out, will cooperate with the Bureau of Industrial Alcohol in working out problems arising under the permissive sections of the national prohibition act. Industrial and scientific problems will be given attention to the end that fair and efficient administration be promoted, he said.

The membership of the committee is:

Dr. William C. Woodward, Chicago, Ill., director, Bureau of Legal Medicine and Legislation, American Medical Association.

Harison E. Howe, Washington, D. C., editor, Journal of Industrial and Engineering Chemistry, American Chemical Society.

H. S. Chatfield, New York City, president, National Oil, Paint and Varnish Association.

S. C. Henry, Chicago, Ill., secretary, National Association of Retail Druggists.

DIET QUESTIONS have GELATINE ANSWERS

BE EXACT WHEN PRESCRIBING "GELATINE"

A great many physicians are prescribing Knox Sparkling Gelatine for cases in which diet is an important factor as a preventive or corrective. Some physicians, however, merely prescribe "Gelatine".

There is such a great difference in gelatines that it is very necessary to designate the kind of gelatine.

For example, our attention has just been called to a case for which a physician prescribed "gelatine" in the diet of a diabetic. When indications of acid developed it was learned that the patient had unwittingly been using a ready-flavored jelly powder containing about 85% sugar, 2% acid-flavoring, 12% gelatine and coloring matter.

To guard against such errors, it is a wise precaution to stipulate Knox Gelatine and especially to call the patient's attention to the importance of the name "Knox".

This is an absolute assurance of the purest gelatine and an insurance against the presence of any foreign element likely to upset the essential balance of the diet.

Always remember to add the name "Knox" to every diet prescription in which gelatine is a factor.

We would like to send every physician a publication on "Diet in the Treatment of Diabetes" by a widely known dietetic authority. This publication presents many new ideas and recipes in the preparation of beneficial diabetic diets. It is of such character that it may be placed in the hands of any patient with the assurance that it will act as a safe diet control, and at the same time make the patient more content with the prescribed diet. This publication will be sent in any quantity, to supply the diabetic patients of any physician who will mail this coupon.

For Example—

BANANA BAVARIAN
(Six Servings)

	Grams	Prot.	Fat	Carb.	Cal.
1¼ tablespoons Knox Sparkling Gelatine	9	8	....	....	....
¼ cup cold water	....	....	....	....	....
1½ cups boiling water	....	....	....	....	....
Grated rind of ½ lemon	....	....	....	....	....
3 tablespoons lemon juice or 1 tablespoon fruit acid	30	....	....	3	....
½ gr. saccharin	....	....	....	....	....
½ cup mashed banana	120	1.5	1	26	....
6 tablespoons cream, whipped	85	2	34	2	....
Total		11.5	35	31	485
One serving		2	6	5	81

Soak gelatine in cold water five minutes. Boil rind and water for two minutes, add gelatine and stir until dissolved. Add lemon flavoring and saccharin, strain and chill. When nearly set, fold in mashed banana and whipped cream, mold and chill until set.

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GELATINE

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134 Knox Avenue, Johnstown, N. Y.

Please send me, without obligation or expense, the booklets which I have marked. Also register my name for future reports on clinical gelatine tests as they are issued.

☐ Varying the Monotony of Liquid and Soft Diets. ☐ Recipes for Anemia.
☐ Diet in the Treatment of Diabetes. ☐ Reducing Diet.
☐ Value of Gelatine in Infant and Child Feeding.

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FLOUR
No Starch
prescribed in
→ Diabetes ←

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Frank M. Noonan, Boston, Mass., Noonan and Sons.
R. R. Brown, New York City, president, U. S. Industrial Alcohol Company.
Fred S. Rogers, Middletown, N. Y., McMonigle and Rogers.
Charles L. Reese, Wilmington, Del., E. I. du Pont de Nemours Company.
Martin H. Ittner, New York City, Colgate-Palmolive-Peet Company, chairman of Industrial Committee of American Chemical Society.
Willoughby M. McCormick, Baltimore, Md., president, McCormick and Company.
Frank A. Blair, New York City, Household Remedies Company.
Donald D. Conn, San Francisco, managing director, California Vineyardists Association.

Druggists Should Not Treat or Prescribe for Venereal Diseases

A plan for combatting venereal diseases was initiated by state health officials following several surveys in which it was revealed that some druggists were following the dangerous practice of giving therapeutic advice and actual treatment to persons suffering from gonorrhea and syphilis, thereby depriving victims of the best of medical care.

At a recent state meeting, the pharmaceutical association adopted the following resolution after a conference with the state health authorities:

"Whereas a considerable part of the prevalence of gonorrhea and syphilis is due to improper and inadequate treatment, as a result of self-treatment, treatment with proprietary preparations, and the advice of persons not qualified to treat either disease:

Be It Resolved, that the Massachusetts State Pharmaceutical Association expresses its desire to cooperate with the Massachusetts Department of Public Health in its efforts to have gonorrhea and syphilis properly and thoroughly treated and, therefore,

Be It Further Resolved that this Association deprecates the sale or advertisement of preparations designed primarily for the treatment of gonorrhea and syphilis, except on the prescription of a licensed physician."

Since that meeting, the Department of Public Health has mailed to the 2000 druggists of the state a copy of this resolution, together with a letter asking cooperation, a publication of the department describing the problem of controlling gonorrhea and syphilis, and copies of a booklet entitled "Information for the Patient".

Commenting on the program in a recent issue of *The New England Medical Journal*, Dr. George H. Bigelow, Massachusetts health commissioner, said:

"Of course there are many druggists who refuse to prescribe for or to treat gonorrhea or syphilis—probably the majority of them, judging from expressions at the meeting of the pharmaceutical association. But if every druggist who is in sympathy with honest practice would, in addition to assisting passively by refusing to accept a patient, place in his hands sound advice as to the importance of competent medical care, much more would be accomplished. Otherwise the patient, going to the drugstore across the way and getting what he wants, is as effectively defrauded of his right to proper treatment as if he had been treated by the first druggist.

"The Department of Public Health proposes to work for the active cooperation of every druggist in the state. At the same time we urge those physicians who treat gonorrhea and syphilis so to equip themselves for the proper and adequate treatment of gonorrhea and syphilis that the patient will be assured of something much better than the druggist can offer.

"The patient who has been sent to a physician by an honest druggist has a right to better treatment from the physician than the druggist could have given him. Inadequate treatment of gonorrhea and syphilis in the physician's office or in the clinic is far more reprehensible than drug store treatment because its inadequacy is camouflaged by the label of medical care. Its victims are defrauded, in the name of medicine, of the one thing they have a right to expect and believe they are getting—proper and adequate treatment and sound advice."



Protein Milk is of unusual value in correcting the intestinal disturbances of infancy

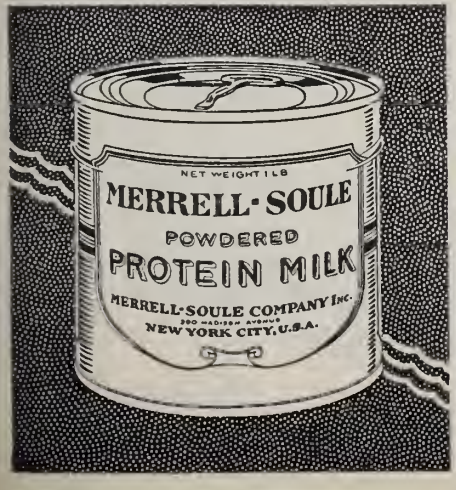
IT is generally agreed that the action of Protein Milk, which makes it successful in overcoming the dietary disturbances of infants, rests upon the following five points.

(1) Removal of whey salts
(2) High protein content
(3) Low milk sugar content
(4) Acidity of not less than pH = 4.5
(5) Fine division of protein curd

Powdered Protein Milk as made by Merrell-Soule is the only product of its kind which meets these rigid requirements. In addition, it is Protein Milk in its *most convenient form*. It is stable and uniform. Published analyses are strictly adhered to.

Literature and samples sent on request

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(Recognizing the importance of scientific control, all contact with the laity is predicated on the policy that Merrell-Soule products be used in infant feeding only according to a physician's formula.)

Merrell-Soule Powdered Milk Products, including Klim, Whole Lactic Acid Milk and Protein Milk, are packed to keep indefinitely. Trade packages need no expiration date.

Review of Statistical Study on Leprosy in the United States

Gradual decrease in the mortality rate at the National Leprosarium at Carville, Louisiana, is revealed in a statistical study of lepers who have been hospitalized there over a period of 34 years, the United States Public Health Service has announced.

Many other interesting and informative facts are brought out in the report.

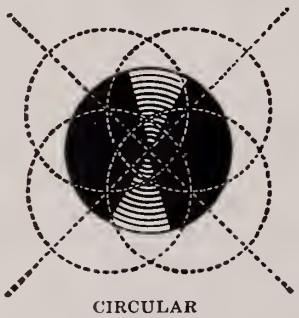
Of the 718 lepers who have been treated in this institution, 215 were foreign born, and 503 were natives of the United States. Mexico, China, Greece and the Philippine Islands have furnished one-half of the total foreign born. The present population of the hospital is 304. Four hundred and eighteen came from Louisiana. The incidence of leprosy among the white population of Louisiana is computed to be twice that in the negro.

Of the total cases 11 per cent were of the nerve type, 39.1 of the skin type and 49.9 of the mixed type; 72.3 per cent were males and 27.7 were females. The social status of the patients represents a cross section of the normal populace.

The average age at onset of the disease is computed at 30.2 years. The average age of admission to the hospital was 36 years, giving an average period of six years prior to admission, during which time each patient may have been a menace to the public health.

In a group of 100 Louisiana lepers hospitalized more than 15 years ago it has been disclosed from subsequent records that in 64 instances only one leper in the family developed the disease, while in the 36 other instances leprosy occurred in 83 additional relatives. There were 14 instances in which the disease occurred in a mother and one or more of her children; 15 instances in which the disease was found in sons of lepers; 21 instances in which the disease was found in daughters of lepers; 38 instances in which the disease was found among brothers, and 31 instances in which the disease was found among sisters. In addition the following number of cases occurred in less closely related members of the family: Eight uncles, 8 aunts, 18 nephews, 9 nieces, 5 grandfathers, 3 grandmothers, 6 grandsons, and 5 granddaughters.

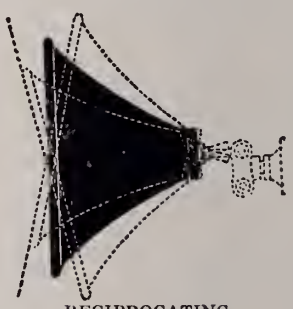
In some families the disease has invaded certain branches to the point of extermination. Instances of the occurrence of leprosy in families have also been noted in cases from other States than Louisiana. It has not invariably happened that the parent became infected before the child; indeed, the reverse frequently occurred. Intimate contact for many years was common where there was more than one case of leprosy in a family. In many instances several contacts with



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—ANNOUNCING—

A NEW PORTABLE VIBRATONE



RECIPROCATING

This unit, known as type "H" Vibratone was designed and built upon the request of physicians and hospital executives for giving bed massage in hospitals and table massage in treatment rooms. It embodies the same working principle as the larger Vibratones, that is, the circular and reciprocating motions, giving a true Swedish Massage.



BED MASSAGE UNIT TYPE H.

It has a universal motor with a rheostat control, so that the motions can be varied from 100 to 1500 per minute, and the power of the machine is sufficient to give deep tissue massage. The entire unit weighs but 26 pounds, while the Vibrator itself weighs only 2½ pounds, so it can be moved about very easily. A revolving holder is attached to the column with a place for each applicator. The Vibrator has a pistol grip and is furnished power by a flexible shaft direct from the gear reduction unit attached to the motor.

Regular equipment consists of five applicators, viz.:

1—4" Gum Rubber Bell.
1—4" Sponge Rubber Pad.
1—3½" Serrated Rubber Scalp Pad.
1—3" Flat Hard Bakelite Disc.
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Wilson's Unsweetened Evaporated Milk is pure, fresh milk, produced in the best dairying sections of America.

The milk is concentrated by removal of approximately 60 percent of its water, by evaporation in partial vacuum. The product is then homogenized, which breaks up the fat globules, thus maintaining an even distribution of the fat content and is sterilized to keep its freshness and purity.

Wilson's Evaporated Milk is ideal for infant feeding, because—

1. It is safe—sterilized and free from any germ or bacterial life.
2. It is wholesome—supplying the food elements necessary to normal growth and is uniformly rich in every drop.
3. It is homogenized—the broken or smaller fat globules are easily digested by baby's stomach.
4. It is rich in all vitamins, which milk can be depended upon to supply.
5. It is readily available—can be purchased at any grocery store.

Whatever formula you use for the modification of cow's milk for infants, Wilson's Milk is an ideal base with which to start.



Opinions of authorities and samples of Milk will be furnished on request

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728 Chamber of Commerce Bldg.
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leprosy also existed. In five cases the incubation period is calculated as not less than six years.

The first manifestation of leprosy was recalled by most patients as one or more spots appearing on the face; in no instance were conditions described that might be identified as the initial lesion of leprosy.

Aside from the increased frequency of cases developing in males at about 21, and in females at about 19, and the counterbalancing rarity of leprosy before the age of nine, the disease appears to manifest itself at all ages about equally.

The duration of leprosy is computed as approximately 14 years. It appears that leprosy greatly shortens the life expectancy of the young, but has less effect on the life expectancy of the aged.

Leprosy itself has been the cause of death in less than 20 per cent of the lepers; lung, kidney and heart disorders indirectly dependent on leprosy have caused more than one-half of the deaths.

Relapse, formerly common among discharged cases, is now rare because of the bacteriological tests made of the blood, skin and other tissues. Of 43 patients discharged from the National Leprosarium by the Public Health Service, treatment completed, only one has relapsed.

Unfit Automobile Drivers

Ten per cent of the motorists in this country are regarded as unfit, either physically or morally, to operate a motor vehicle. This is shown by the figures of the motor vehicle departments of 11 states having nearly a third of the total automobile registration at the close of last year.

These 11 states, according to reports gathered by the Travelers Insurance Company, suspended or revoked the registrations or licenses of 77,704 motorists out of a total of 7,178,111 registrations. None of the suspensions or revocations included in the analysis was caused by insurance laws, such figures having been excluded.

When asked to indicate the number of motorists whom they regarded as unfit to drive a car, several motor vehicle commissioners placed the figure as high as 12 to 15 per cent, and one gave it as his opinion that 3 per cent of the motorists are of the criminal type.

Driving while under the influence of liquor, excessive speed and failure to report an accident were given as the principal causes for the suspension and revocation of registrations and licenses. In two of the states all the suspensions and revocations resulted from the attempt to combine driving and liquor, while in a third state the motor vehicle commissioner claimed that 95 per cent of the suspensions and revocations were due to the same cause.

That physical defects play an important part in this country's rising toll of motor vehicle vic-

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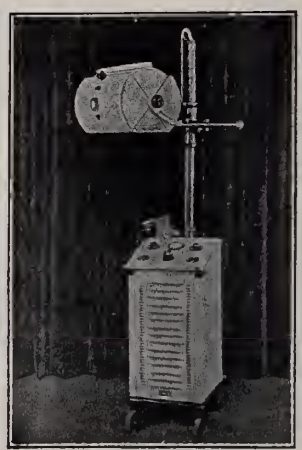
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Phenylazo-alpha-alpha-diamino-pyridine hydrochloride
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For the treatment of urinary infections

May be administered orally or applied locally.
Non-toxic and non-irritative in therapeutic doses.
Marked tissue penetrative power.
Rapidly eliminated through the urinary tract.

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Not all desirable advertisers use space in this publication; but most of them will do so when they learn that the present patrons secure good results. This can only mean that unless you give preference in your buying to firms that now advertise here, you are helping to keep other desirable advertisers out. We earnestly urge you to cooperate with your publishers in always making your own State Journal the medical authority for reliable advertising.

When you are asked to buy medicinal or other goods the first question to ask yourself should be "Is it advertised in our State Journal"? If not, the advertising for good reasons may have been declined in order to protect you and you would do yourself and your Journal a kindness by declining to patronize them. Other desirable advertisers will use space in your Journal when you let their salesmen know the advertising pages of your State Journal are your guide.

tims is indicated by the report of one state where last year more than 18,000 conditional licenses were issued, as against nearly 50 times that number of regular licenses. This ratio indicates that one out of every 50 motorists suffers from some bodily ailment that might interfere with one's ability to operate a car properly.

Many of the state authorities were unable to provide any figures which might show the number of unfit drivers in their jurisdictions, because regulatory machinery had not been created by law. Some expressed the hope, however, that their states would make it necessary for motorists to obtain drivers' licenses and thereby enable them to tighten up on motorists' requirements.

Statistics compiled by states which keep up tabulations on the occurrence of motor vehicle accidents reveal that most of the automobile mishaps are caused by drivers of several years' experience. This fact has led one state official to suggest that a re-examination of all drivers should be undertaken in order to ascertain whether anyone through age or other circumstance has suffered bodily impairment that would interfere with driving. "If such a re-examination could be had," says this state official, "and thereafter a policy adopted by which every person who committed any offense whatever was at once re-examined by a high grade examiner capable of studying human characteristics and under the direction of expert advice as to how to detect human imperfection, it would not be long before the 12 persons out of every 100 who are making most of the trouble would be detected and to a large degree eliminated from traffic."

One state official, in reporting a reduction in the number of accidents for a recent month, pointed out that the "club of enforcement" was necessary in order to "slow down the wild ones." An official in another state, in a concerted drive conducted among several hundred thousand motorists to find out whether brakes, lights, steering gears, etc., were kept in good condition, found that 10 per cent of the cars examined were in need of brake adjustments and that 11 per cent of the car lights were defective.

The greatest vigilance in the regulation of traffic is required from 4 to 6 o'clock in the afternoons, it is revealed by the detailed reports of a number of states which are in the front rank of motor vehicle accident prevention. On Saturdays and Sundays this vigilance must be increased, as these two days of the week show the greatest number of accidents, with Sunday in the vanguard in this respect.

Pedestrians, the reports show, still insist on taking their lives in their hands in crossing streets. Many are hurt each year while crossing against lights, although more are killed and hurt while crossing intersections wthout signals or the presence of police. Many others become casualties in dodging from behind parked cars on their way across streets.

WOUNDS-INJURIES

The neglect of a simple wound or minor injury may prove serious and even endanger the life of the individual.

The increased use of Tetanus Antitoxin indicates the more general employment of this product by physicians as a precautionary measure against the development of Tetanus.

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Tetanus Antitoxin Lederle, is a potent, refined and highly concentrated product. It is supplied in syringes ready for immediate use.

Syringes contain { *For Prophylaxis* — 1500 Units; *For Treatment* — 5000 Units, 10000 Units, 20000 Units

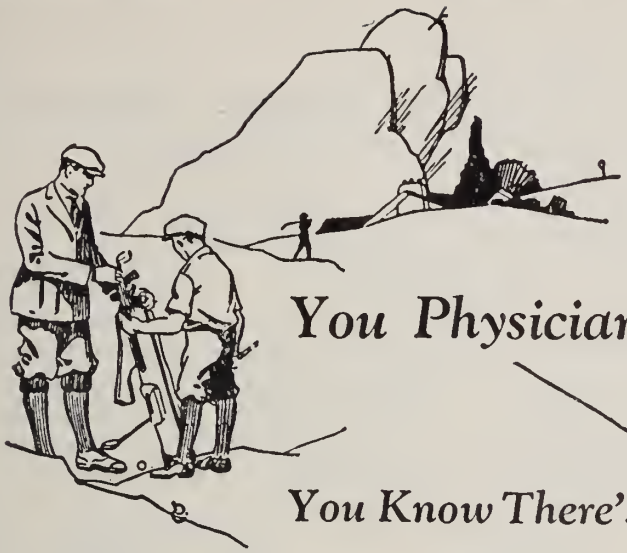
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Among children, who number a third of all the pedestrians killed and injured in motor vehicle accidents, the reports show more boys are hurt than girls.

It is also revealed that most of the automobile accidents happen during the daytime, when weather conditions are good, and where the roadway or street is improved and dry.—*Ohio Health News.*

Physical Fitness in Relation to Aviation

Data gained from a study of the physical records of more than 9,000 aviation students make it appear beyond question that a man's physical condition bears a direct relation to his ability to fly, according to Dr. L. H. Bauer, Medical Director, and Dr. H. J. Cooper, Assistant Medical Director, Aeronautics Branch, Department of Commerce.

A man is taking a long chance in starting training unless he can pass the transport pilot's physical examination, it was declared. If he barely passes the private grade, it was said, his prospects of getting anywhere are almost cut in half. If he cannot pass the private grade of license, it would be useless to consider him for a waiver, as he has not over one chance in 10 of ever progressing.

That a man who cannot meet the physical standard may still learn to fly is granted, it was said. That the hazards are increased in his case cannot be doubted, it was pointed out.

The idea of the study was to determine what percentage of students with and without physical defects reached a higher grade. There are many factors determining this.

For example, it was explained, a student may lose interest, or he may be unable to learn to fly for other than physical reasons. These factors, however, inasmuch as they affect all groups equally, may be considered as having no effect on the statistics compiled.

A total of 9,103 records were studied. The number, it was said, is sufficiently large to warrant drawing deductions.

These cases were classified as follows:

The first group consisting of those students having no physical defects, of whom there were 7,660.

The second group, composed of those students having no physical defects, who eventually received a pilot's license, namely transport, limited commercial, industrial, or private. Of these there were 2,684.

In other words, 35.4 of all students without physical defects eventually obtained at least a private license.

In the third group were those students having minor physical defects which, while disqualifying for transport grade, are not disqualified for private or industrial licenses. There were 999

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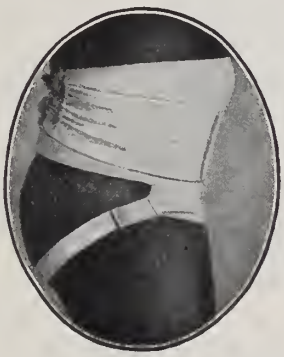
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cases in this group; of these 303, or 30.3 per cent, eventually reached at least a private grade.

The fourth group, it was pointed out, was composed of those having major physical defects, still qualifying for a private license, but disqualifying for a passenger-carrying grade. Defects such as vision, nose and throat, minor nervous disorders, not serious enough to disqualify, were among those listed.

This group, it was expected, would have more difficulty in learning to fly, and the results of the study confirmed this. There were 404 cases in this group, and 75 eventually received at least a private license, or only 18.5 per cent, it was brought out.

The fifth group, Dr. Bauer and Dr. Cooper stated, consisted of those who had defects that were disqualifying for all grades, but who for some reason, were allowed to fly. This reason usually was because of an error on the part of the examining physician in issuing a permit, or because the man had spent a considerable amount of money before being notified of disqualification.

In such cases, the man was promised an opportunity to get a private license. Yet, of 40 cases in this group, only 5 received a private license or better, and one of these was killed immediately after receiving his license, caused unquestionably by his physical defect. Hence only 4 cases or 10 per cent ever made any progress.

This study has vindicated the standards set by the department as not too strict, it was declared, and further indicates that the standards for private grade is possibly too lax. It has still further supported the belief that waivers should never be granted a student, according to the statement.

It has been decided that a further study is necessary with a view to investigating the effect of specific physical defects on flying ability, rather than physical defects as a group, it was stated. To this end a study of 11,000 more cases, making a total of 20,000, will be made during this year.

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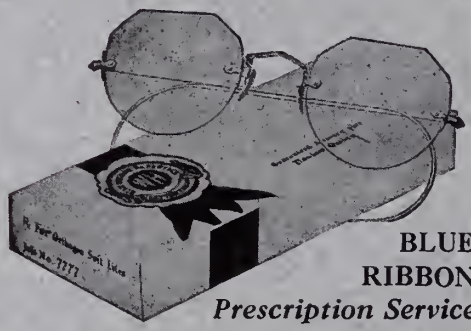
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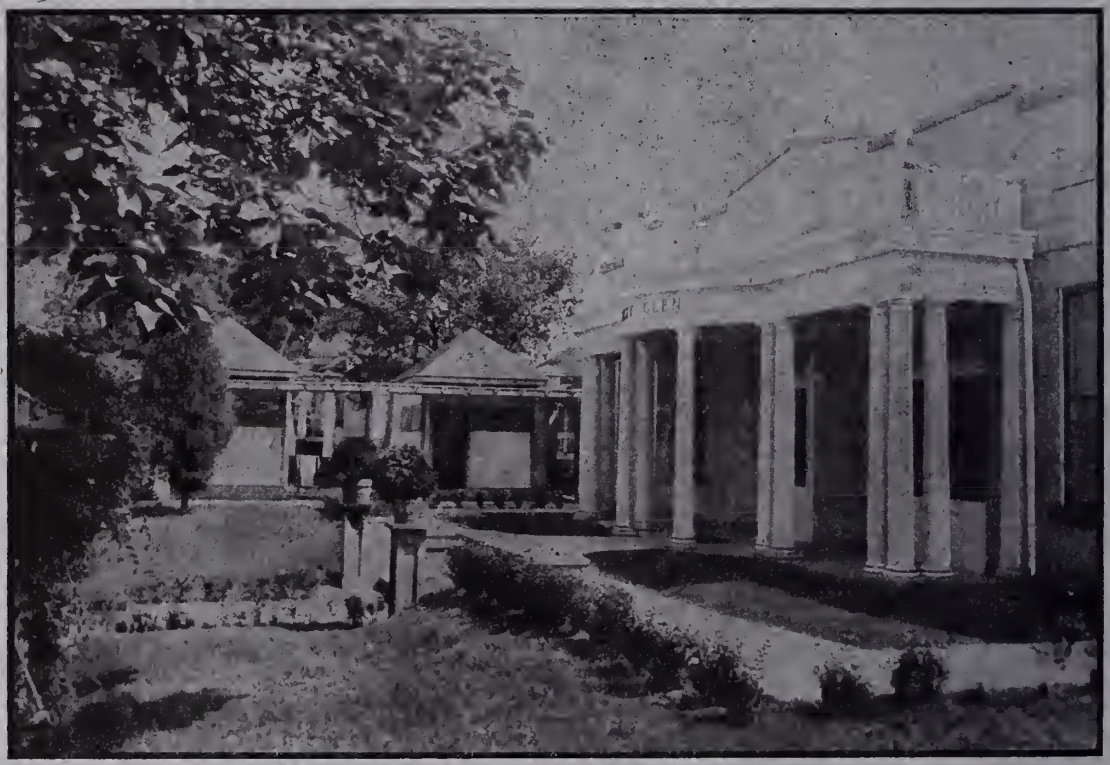
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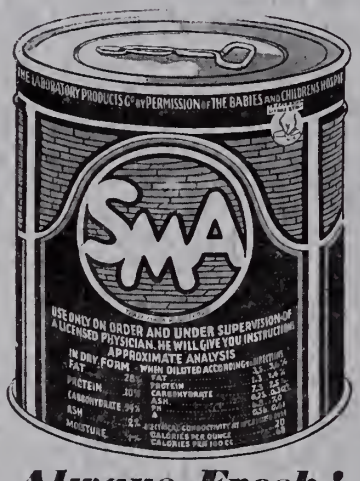
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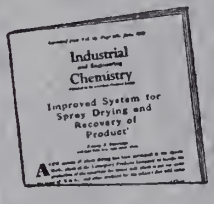
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Ashtabula	A. J. Pardee, Ashtabula	R. B. Wynkoop, Ashtabula	1st Tuesday, monthly.
Cuyahoga	V. C. Rowland, Cleveland	Claude D. Waltz, Cleveland	Every Friday evening.
Erie	J. T. Haynes, Sandusky	G. A. Stimson, Sandusky	Last Thursday, monthly.
Geauga	Clara J. Swan, Chardon	Isa Teed-Cramton, Burton	Last Wednesday, Apr. to Dec.
Huron	John A. Sipher, Norwalk	B. C. Pilkey, Norwalk	2d Thursday, monthly.
Lake	C. H. Browning, Painesville	F. J. Dineen, Painesville	4th Tuesday, monthly.
Lorain	W. S. Baldwin, Lorain	W. E. Hart, Elyria	2d Tuesday, monthly.
Medina	M. F. Miller, Wadsworth	J. K. Durling, Wadsworth	3d Thursday.
Trumbull	Ralph Herlinger, Warren	R. H. McCaughtry, Warren	3d Thursday, monthly, except June, July, August.

Societies	President	Secretary	
Sixth District	H. M. Scbuffell, Canton	J. H. Seiler, Akron	2d Wed., Jan., April & Oct.
Ashland	D. L. Mohn, Ashland	H. M. Gunn, Ashland	1st Friday, bi-monthly.
Holmes	J. C. Elder, Millersburg	A. T. Cole, Millersburg	1st Tuesday, quarterly, Jan., April, July, October.
Mahoning	H. J. Beard, Youngstown	J. P. Harvey, Youngstown	3d Tuesday, monthly.
Portage	W. B. Andrews, Kent	E. J. Widdecombe, Kent	1st Thursday, monthly.
Richland	Leopold Adams, Mansfield	D. C. Lavender, Mansfield	3d Thursday, monthly.
Stark	R. J. Shipley, Canton	F. S. VanDyke, Canton	3d Tuesday, Jan., March, May July, Sept., Nov.
Summit	R. E. Amos, Akron	A. S. McCormick, Akron	1st Tuesday, monthly.
Wayne	W. B. Turner, Wooster	R. C. Paul, Wooster	2d Tuesday, monthly.
Seventh District	A. E. Weinstein, Steubenville	Carl Goehring, Steubenville	Steubenville, 1931
Belmont	C. J. Holley, Bridgeport	C. W. Kirkland, Bellaire	2d Wednesday, monthly at 1:45 p.m.
Carroll	(With Stark Co. Society)		
Columbiana	R. T. Holzbach, Salem	T. T. Churcb, Salem	2d Tuesday, monthly.
Coshocton	F. M. Marshall, Coshocton	J. D. Lower, Coshocton	4th Thursday, April, June, Sept., December.
Harrison	J. M. Scott, Scio	R. P. Rusk, Cadiz	3d Wednesday, monthly.
Jefferson	V. B. Di Loreto, Steubenville	M. H. Rosenblum Steubenville	Last Friday, monthly.
Monroe	G. W. Steward, Woodsfield	A. R. Burkhart, Woodsfield	2d Wednesday, monthly.
Tuscarawas	Jay W. Calhoon, Uhrichsville	R. E. Wolf, Uhrichsville	1st Thursday, monthly.
Eighth District	J. G. Shirer, Newark	H. A. Campbell, Newark	
Athens	C. C. Butt, Nelsonville	T. A. Copeland, Athens	1st Monday, monthly.
Fairfield	A. A. Brown, Carroll	C. W. Brown, Lancaster	2d Tuesday, monthly.
Guernsey	C. L. Vorhies, Cambridge	Gordon Lawyer, Cambridge	1st and 3rd Tuesday each month.
Licking	E. A. Moore, Newark	D. A. Skinner, Newark	Last Friday, monthly.
Morgan	D. G. Ralston, McConnelsville	C. E. Northrup, McConnelsville	3d Wednesday, monthly.
Muskingum	W. F. Sealover, Zanesville	Beatrice Hagen, Zanesville	1st Wednesday, monthly.
Noble			First Thursday, monthly.
Perry	R. W. Miller, Hemlock	F. J. Crosbie, New Lexington	3d Monday, monthly.
Washington	J. B. Penrose, Marietta	J. R. Warren, Marietta	2d Wednesday, monthly.
Ninth District			
Gallia	O. A. Vornholt, Gallipolis	Milo Wilson, Gallipolis	1st Thursday, monthly.
Hocking	O. V. Donaldson, Gore	M. H. Cherrington, Logan	
Jackson	Gomer E. Jones, Oak Hill	W. R. Riddell, Jackson	1st Tuesday, monthly.
Lawrence	G. G. Hunter, Ironton	F. R. Stewart, Ironton	1st Thursday, monthly.
Meigs	P. A. Jividen, Rutland	Byron Bing, Pomeroy	1st Thursday, April, July and Oct.
Pike	O. R. Eylar, Waverly	L. E. Wills, Waverly	1st Monday, monthly.
Scioto	T. C. Crawford, Portsmouth	C. M. Fitch, Portsmouth	2d Monday, monthly.
Vinton	O. S. Cox, McArthur	H. S. James, McArthur	3d Wednesday, monthly.
Tenth District			
Crawford	Clarence Adams, Galion	R. M. Malone, Galion	1st Monday, monthly.
Delaware	M. S. Cherington, Delaware	A. R. Callander, Delaware	1st Friday, monthly.
Franklin	R. B. Drury, Columbus	James A. Beer, Columbus	1st four Mondays.
Knox	W. H. Eastman, Fredericktown	J. Shamansky, Mt. Vernon	Last Thursday, monthly.
Madison	R. H. Trimble, Mt. Sterling	H. P. Sparling, London	4th Wednesday.
Morrow	F. E. Thompson, Marengo	Todd Caris, Mt. Gilead	1st Wednesday, monthly.
Pickaway	J. B. May, New Holland	Lloyd Jonnes, Circleville	1st Friday, monthly.
Ross	John Franklin, Chillicotbe	W. C. Breth, Chillicothe	1st Thursday, monthly.
Union	F. M. Wurtsbaugb, Richwood	H. C. Duke, Richwood	2d Tuesday, monthly.

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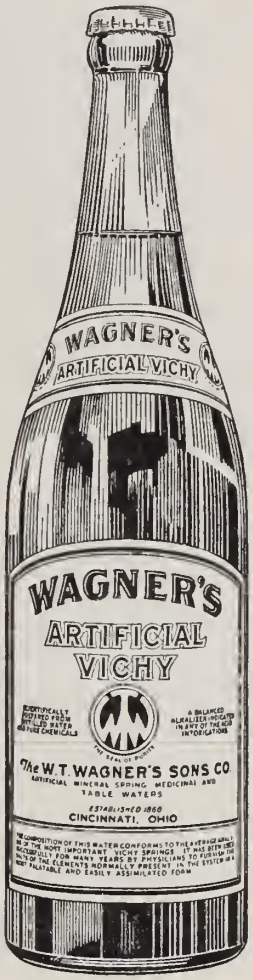
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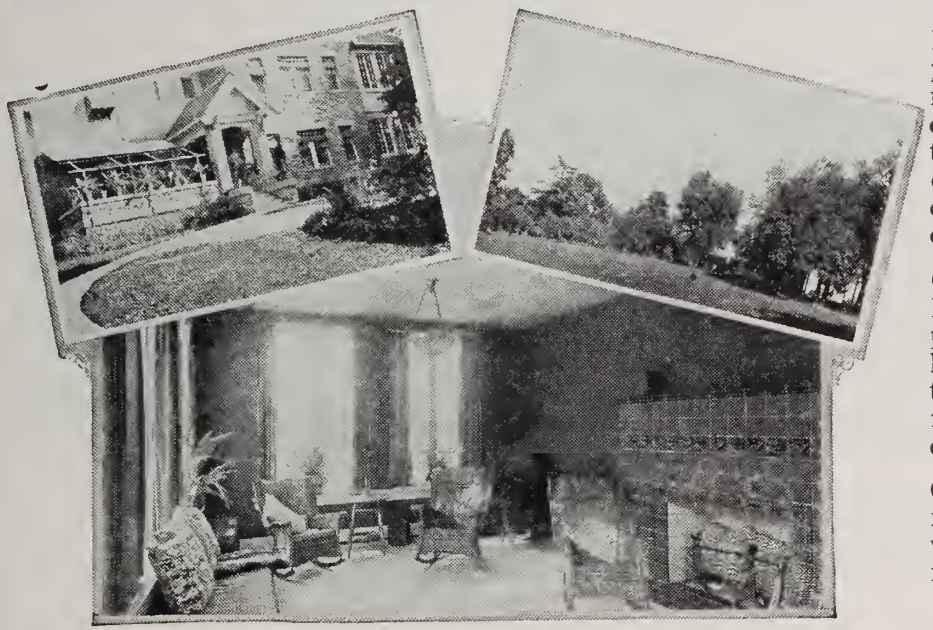
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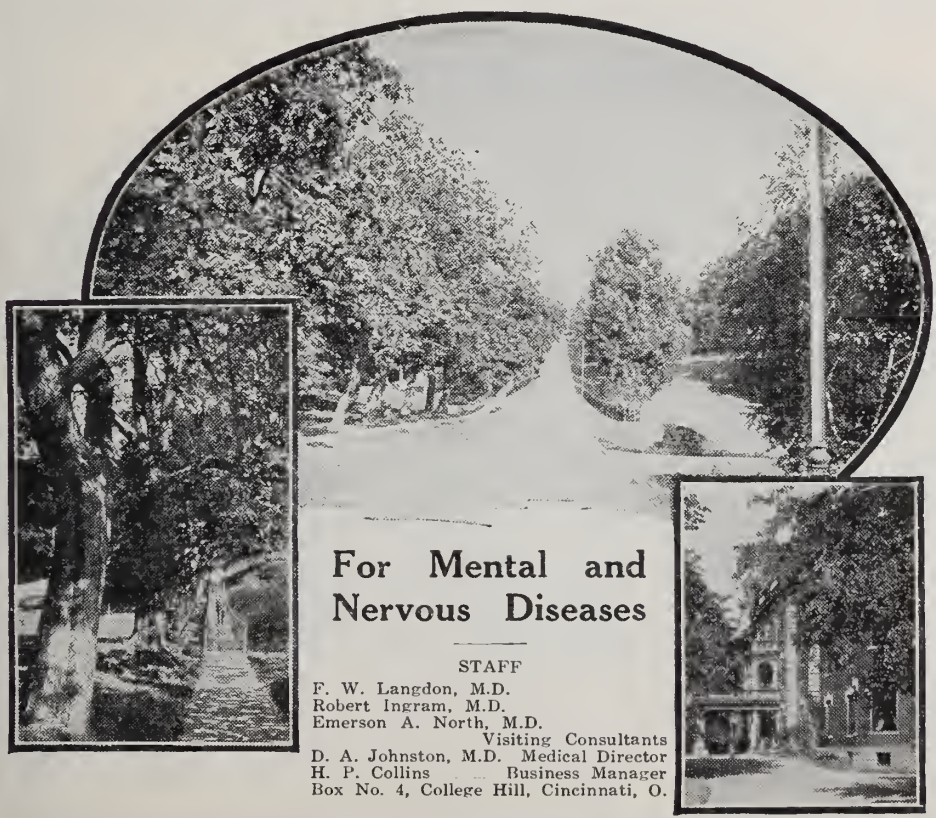
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PUBLIC HEALTH — SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Organization Activities in High Speed

Prompt resumption of regular meetings and other activities by local academies of medicine and county medical societies following the summer period indicates that medical organization in Ohio is aware that a busy fall and winter is ahead and that local units as well as the state-wide organization, must function at full speed to insure proper preparedness for the active weeks and months to come.

Reports from many of the academies and county societies evidence the fact that the forthcoming months are to be of unusual educational value to Ohio physicians. Practically every county society has made an effort to outdo its neighboring county group in the matter of arranging attractive scientific programs.

A large number of county societies have booked prominent and well-known speakers from this and other states for talks during the fall and winter months. Several societies have arranged joint meetings with neighboring county societies. Many have tentative plans for joint meetings and social gatherings with organizations composed of members of other professions, such as lawyers, druggists, dentists and ministers. Numerous interesting symposiums and clinics have been scheduled. In fact, an analysis of all the reports indicates that unprecedented emphasis is being placed this year by local medical organizations on the educational and scientific benefits that may be derived by all physicians in associating themselves with their colleagues in organized activities.

Special emphasis also is being directed toward the business and economic questions of medicine and medical practice. Many local societies have scheduled symposiums for the discussion of economic and social problems as they affect the practice of medicine. Every county society should by all means leave adequate space on its year's program for a thorough discussion of these questions and, if possible, as an organization take the initiative in solving local problems of this nature.

Two factors that make this year one of vital importance to the medical profession generally and should stimulate activity and interest in medical organization are: the general election in November and the forthcoming session of the Ohio General Assembly.

As pointed out previously in these columns, the medical profession as individual citizens and as a professional group whose primary interest is in the welfare of the public has a right to take a keen interest in the type of men and women running for public office, as well as in the kind of legislation being proposed on subjects in which the medical profession is especially interested. While the attitude of medical organization, especially, must, as in the past, be wholly non-partisan and non-political, this does not mean that physicians should fail to register a protest against candidates who are known to be foes of scientific medicine and enemies of public health and welfare. Neither, does it mean that medical organization shall not raise its voice against enactment of legislation that the medical profession by virtue of its scientific training and experience knows would be detrimental to the health and welfare of the public.

Previous to the November election opportunity should be afforded every member of every county society to learn of the qualifications of all candidates for local and state offices, and especially of their attitude on medical, health and welfare questions. The legislative committeemen in each county society, in close touch with the Policy Committee and headquarters of the State Association, are prepared to make suggestions and lead discussions on matters of public policy both now and during the session of the Eighty-Ninth General Assembly. These committeemen should be given the undivided cooperation of their colleagues and an opportunity to make comments and suggestions at regular society meetings.

Officers and committees of the State Association have put in an exceptionally busy summer, due to the many complex economic and social questions that have arisen and in anticipation of the coming legislative session. The Policy Committee has met frequently during the past three or four months and has already assembled information on scores of prospective legislative measures affecting public health and medical practice that must be met when the Legislature assembles. The Medical Economics Committee has been exceptionally busy on a study of the several important problems referred to it for investigation by the House of Delegates and the council. The Medical Defense Committee has handled a large amount of work during the past few months. The Publication committee has had its consecutive and many duties. The other state committees are and have been functioning on their multiple activities.

Unity, concerted activity and keen interest are

apparent in the ranks of the medical profession in Ohio as this high pressure period of the year arrives. These vital elements in organization must be maintained if the important questions and problems are to be successfully met.

Medical Education in Ohio

In this issue of *The Journal* will be found an article dealing with medical education in Ohio and summarizing the facilities offered by Ohio's three Class A medical schools, as well as enrollment statistics and data on their contemplated programs for the 1930-31 school year now under way.

Ohio is extremely fortunate in having three so highly-rated and well-equipped medical schools as those conducted at Western Reserve University, University of Cincinnati, and Ohio State University.

Perhaps no state in the Union excels this in the opportunities offered potential physicians to obtain a competent, well-balanced and thoroughly-modern training in scientific medicine. Ohio's three schools are recognized as among the leaders in medical education.

Instructors of recognized ability have been selected to complete their faculties and funds contributed for the support of the three schools have been wisely expended in making their physical plants complete and modern.

The high regard which prospective medical students have for Ohio's medical schools is evidenced to an unusual degree by the statistics on applications for entrance to each school. Each of the three Buckeye institutions has in recent years been literally swamped with applications for entrance into the medical course despite the fact that they, like all other medical schools, have, for obvious and practical reasons, been forced to limit their freshman classes to but a comparatively small proportion of those seeking admittance. It has not been unusual during the past few years for the three Ohio medical schools to refuse admittance to approximately nine-tenths of those filing applications for entrance in order to maintain the high standards established by the schools and to insure adequate and efficient training for those admitted. In other words, Ohio's medical schools have quite properly turned a deaf ear to the arguments advanced by proponents of the mass-education, quantity-production idea, and have adhered to a theory of quality and competence in the selection and training of student physicians.

Frequently medical educators are criticized for placing such rigid restrictions on enrollments and for requiring exceptionally high scholastic ability from those seeking entrance to medical schools. These critics advance the fallacious argument that there is a shortage of physicians and that medical schools must open wide their gates to all types of students in order to recruit the allegedly diminishing ranks of the medical profession.

State, as well as national statistics, do not bear out such mis-statement of the situation. Analysis of Ohio statistics reveals that the annual output of new physicians is quite adequate to meet the demands of both rural and urban communities. That rural districts are suffering from lack of proper and adequate medical service because younger physicians are settling in urban areas is as yet unproved. As a matter of fact, recent data shows that an exceptionally large number of physicians have within the past few months moved from the larger cities to smaller ones, and even to villages and hamlets. The same trend also has been noted among the graduates of the past few years, many of whom have chosen rural communities in which to practice.

All things considered, Ohio's medical school authorities have wisely refused to be converted to the belief that medical education standards should be lowered to meet the question of distribution of physicians which is of itself an economic problem and must be solved along economic lines.

Those in charge of Ohio's medical schools are faced at all times with the necessity of keeping student enrollments compatible with the facilities of their respective schools. Over-crowded classes have been proved destructive to classroom and laboratory efficiency and detrimental to the best interests of the student body generally. An effort to avoid this danger should be made at all times.

Also, leaders in medical education have learned that the training of physicians must be viewed to some extent from a sociological and economic point of view. Careful analysis of student groups over a given period has shown that only a limited number of applicants to medical schools possess the ability, the proper characteristics and physical attributes necessary to insure them of at least a fifty-fifty chance for success as practicing physicians.

For this reason, medical educators have found it advisable to utilize the utmost care in selecting those wishing to enter the long period of academic training and the strenuous years of active practice ahead. In carrying on this important task of weeding out the unqualified, medical school authorities have attempted to be broadminded and fair, and at the same time cautious in seeing that only the best qualified are selected. No standardized methods of selection have been formulated. Each applicant is studied on the basis of individual ability, temperament, reactions and general scholastic background. Just what qualities a student must possess to make him reasonably sure of success in the field of medicine are debatable. Medical educators themselves differ on this question but all seem to be in

agreement that success is dependent to a large extent on individual effort, energy, industry, intelligence and steadfastness of character.

Through the practical application of careful methods of selection, many students, destined to become misfits in medicine, have been steered into other professions and vocations where they have achieved success and have been prevented from wasting years in finding out that they never would become successful physicians.

How well the present system of medical education, with its high standards, has met this important social and economic problem is revealed by contrasting its results with those obtained in some of the other professional fields.

At the present time, leaders in the legal profession are disturbed about the oversupply of attorneys and the enormous mortality rates in examinations for admittance to the bar. Hundreds of law school graduates are finding themselves unable to pass state bar examinations and many others, while successful in the examinations, have found themselves misfits in their chosen profession and have been forced to take up other work in order to make a living for themselves and their families.

As one writer, in discussing the present difficulties confronting the legal profession, puts it:

"There can be no quarrel with stiff examinations insofar as they are designed to maintain high standard in the law, or any other profession. When a profession has become overcrowded, however, it seems as though a more humane way might be discovered to reduce the number of recruits. If our law schools are accepting and training two students when there is only room for one, something is wrong. Whatever the legal profession may gain by flunking half the students after they have spent three or four years in study and hope, society is bound to lose. Society cannot afford to lead its young people up to many false paths, cannot afford to burden itself with a multitude of broken-hearted, disillusioned students, cannot afford the luxury of a system which is only 50 per cent efficient. If a profession needs only about so many new men each year, why let the schools go on pouring out twice the number. If a student's fitness or unfitness for a profession can be determined by examination why not do it earlier in the game."

Here is a principle that medical educators have long since felt was sound and its general application in medical education has been one of the prime factors in minimizing failures in the ranks of the medical profession. The severe pre-entrance examinations and investigations imposed on prospective medical students have done much to reduce the mortality rate in classroom work and in the state board examinations that follow graduation.

Those charged with the administration of the three Ohio schools are to be commended for their tenacity in maintaining the high standards so necessary for sound and adequate medical education.

1931 Annual Meeting Plans Under Way

Preliminary arrangements for the Eighty-Fifth Annual Meeting of the Ohio State Medical Association next May 12 and 13 are well underway.

Special emphasis at this time is being placed on the drafting of the programs for the various scientific sessions under the supervision of the Council program committee, composed of Dr. D. C. Houser, Urbana, chairman; Dr. D. J. Slosser, Defiance, and Dr. S. J. Goodman, Columbus, secretary.

Officers of the various sections have been busy for more than a month arranging for papers and discussions to be presented before their respective sections at the forthcoming annual gathering and are expected to make their preliminary report on progress to the Council program committee at an early date.

The Council committee and the section officers are anxious for suggestions from members of the State Association as to subjects that may be presented for discussion at the sectional gatherings. As in the past, every effort is being made to formulate a well-balanced program for the 1931 meeting and make the program at each sectional session of general interest, with an especial appeal for physicians in general practice.

Members of the State Association who desire to present papers at the 1931 meeting or be scheduled as discussants should inform the officers of the section in which they are interested as soon as possible. Those members who have been, or will be, requested to submit essays or present discussions are urged to accept if at all possible, and to cooperate with the section officers in helping to make the scientific program of the next annual meeting of as high a caliber and as attractive as those of past annual meetings.

Officers of the various scientific sections to whom communications regarding the scientific section programs at the Eighty-Fifth Annual Meeting should be addressed are:

Medicine—Dr. Julien E. Benjamin, 19 West Eighth St., Cincinnati, chairman; Dr. Leo C. Bean, Gallipolis, secretary.

Surgery—Dr. Fred M. Douglass, 421 Michigan St., Toledo, chairman; Dr. M. E. Blahd, 3912 Prospect Ave., Cleveland, secretary.

Obstetrics and Pediatrics—Dr. Wayne Brehm, 683 East Broad St., Columbus, chairman; Dr. Jacob V. Greenebaum, 19 West Eighth St., Cincinnati, secretary.

Eye, Ear, Nose and Threat—Dr. J. W. Millette, 117 South Main St., Dayton, chairman; Dr. A. L. Brown, 2700 Union Central Building, Cincinnati, secretary.

Nervous and Mental Diseases—Dr. Louis J. Karnosh, City Hospital, Cleveland, chairman; Dr. John D. O'Brien, 332 Market Avenue, N., Canton, secretary.

Public Health and Industrial Medicine—Dr. J. F. Elder, Court House, Youngstown, chairman; Dr. George F. Sykes, White Motor Company, Cleveland, secretary.

Emphasis on Medical Economics

"It seems more than passing strange that the profession of medicine in the United States still contains a few, a very few, members who believe that there is no such thing as the economics of medicine," declares a writer in a contemporary journal.

"Yet that is a fact", he continues. "Like the proverbial farmer seeing his first giraffe, the proverbial ostrich with his head in the sand, and the cow that stands peacefully in the middle of the crossroads oblivious to automobiles rushing from four directions, they stubbornly refuse to recognize a fact which is perfectly apparent.

"If this stubborness existed only in the back woods and along the outposts, it wouldn't be half so serious. But it exists in exactly the place, where new modes of thought ought to originate, where new remedies ought to be applied to old problems, where new inspiration ought to be injected in the veins of an old profession—namely, our medical schools (or the majority of them at least).

"Is it any credit to American medicine that only three out of 72 accredited medical schools in this country offer anything in the nature of a course on medical economics? Can anybody take pride in the fact that an additional three devote an hour or two out of four years to a brief lecture on this subject, and that the remainder just seem to sit back and chuckle in the manner of the farmer in front of the giraffe and murmur, 'Ther ain't no sech animal'?"

We are not in a position to vouch for the accuracy of the statistics used in the foregoing discussion; it may be that the writer is unduly severe in his criticism of medical college administrators. However, the underlying appeal contained in the above paragraphs should act as a spur to the medical profession generally to check up on its attitude toward this very important question.

The various academies of medicine and county medical societies of Ohio, may well take an inventory to find out if they are devoting enough attention to the question of medical economics and if sufficient time on their programs has been allotted to discussions on this subject.

An increase in the interest of the practicing profession toward the problems of social medicine and a little pressure from the various county societies would undoubtedly result in a greater recognition of the importance of this question on the part of medical school officials. At least, the county societies can set the example, and, in the end, go far toward keeping members of the profession in touch with the newest developments in the economic, social, and governmental phases of the practice of medicine.

How important it is for every physician to have a clear conception of the more serious economic and social problems affecting medical practice and public health is well stated by Dr. Williard C. Rappleye, director of study for the Commission on Medical Education, in an address which he made recently before a group of medical students.

"I have very little hesitancy in believing that a discussion of ways and means of distributing the economic features of illness over large groups of the population is going to be an increasingly important problem before the medical profession," Dr. Rappleye declared.

"We already see in this country a considerable development of industrial medicine and various other devices that are either insurance or closely resemble it. Possibly most of you do not realize that 23 of the leading countries of the world have already adopted national compulsory insurance. * * * I mention this problem without discussing the merits, the difficulties and the defects of various forms of insurance but merely to bring to your attention the fact that we are likely to have discussion of the economics of medical service pressing upon us with increasing insistence during the next few years. All of these plans have significant and, in some instances, unhappy implications for the doctor."

The Span of Life

Nothing has happened to encourage the hope that the span of life might be lengthened despite extraordinary improvements in the field of medicine and in public health practice within the last century, Dr. L. I. Dublin, statistician of the Metropolitan Life Insurance Company, believes.

A discussion of Dr. Dublin's contention in the *Metropolitan Statistical Bulletin* points out that there has been some confusion in the past in the use of the expresison "life span". It is emphasized that there can be marked improvement in the *expectation of life* or *the mean length of life* in spite of the fact that the *span of life* has, so far as is known, changed little or not at all since remote antiquity.

The analysis of the subject reveals that persons do not live to more extreme old age than they used to, but that a greater proportion of them live to relatively advanced ages, thus pulling up the average. This is illustrated by the fact that many more now pass through the dangers of infant mortality than was the case even at the beginning of the present century, which means that the mean length of life is much greater than formerly, though the upper limit of life—a few years past the century mark—is just as inexorable today as it was a hundred or a thousand years ago.

Surgical End Results of Hyperthyroidism

M. E. BLAHD, M.D., Cleveland

IT is generally conceded by those concerned with the treatment of hyperthyroidism that thyroidectomy, judiciously employed, will give the best average results. The word average is used advisedly, because at the present time, there is no known method which will restore 100 per cent normalcy. It is not the object of this essay to discuss the accepted and tried principles of the treatment of hyperthyroidism, but rather to stress such factors which are prone to be underestimated and to clarify others about which there is ambiguity. The end results vary in direct ratio to the consideration given not alone to the details of the pre-operative, operative, and immediate post-operative care, but also to a carefully supervised follow-up.

A carefully supervised follow-up involves a protracted rest period, the removal of all foci of infection, and as far as is possible, the elimination of all factors deleterious to the health of the individual. Perfect results will be more closely approached if more attention is paid to minor details, and less reliance is placed in thyroidectomy as an independent curative measure. Because this fact has not impressed itself upon the minds of the medical profession, we have failed to convince the laity that thyroidectomy is only one link in the therapeutic chain necessary for the cure of hyperthyroidism.

The forging of this chain begins with *early diagnosis* in order that corrective measures may be instituted before permanent degenerative changes have taken place in the heart and parenchymatous organs. It seems almost an absurdity to state that unless operative procedure is instituted before lasting damage has been done to the vital organs, the 100 per cent normalcy for which we are all striving cannot even be approached, much less attained. It is incredible in this enlightened medical age that a patient is permitted to burn up his resistance and vitality to such an extent that within the short period of one month, there should be a loss in weight of 40 lbs. Such a case was recently referred by a physician who had applied temporizing methods over a period of two years. The futility of attempting to restore a patient handicapped by such a sudden and great loss of weight with the accompanying high grade myocarditis and renal insufficiency is surely apparent. The eternal cry for the early reference of surgical patients before irreparable damage has been done is especially true in this class of patients.

The administration of Lugol's solution, sedatives, and rest as the pre-operative treatment is so well established that we may disregard it in this paper, thereby permitting us to proceed to the next link, which is the removal, at operation, of sufficient gland to completely overcome the hyperactivity of the thyroid. There is an axiom in plastic surgery to make the flap one-half again as large as appears necessary. In thyroidectomy the reverse is true, that is, remove one-half again as much tissue as seems essential. It must always be borne in mind that we are dealing with hyperactive glandular tissue, and that a very little goes a long way. It has been my practice to remove the entire thyroid gland with the exception of a thin layer of tissue which when stretched out will barely cover the lateral tracheal walls. This necessitates removing all but that small portion of the thyroid gland and capsule needed to protect the parathyroids and the recurrent nerve. The danger is not in removing too much, but rather too little gland. Most surgeons have had the unfortunate experience of having to re-operate a considerable number of cases in which this procedure has not been followed. In support of this contention I wish to briefly report one of my own very early cases in which I did not yet have the temerity to remove sufficient tissue.

E. R., 18 years of age, a university student, who had been actively engaged in athletics, especially boxing, consulted me for lack of endurance, cardiac palpitation, shortness of breath, and recent loss of weight. Examination revealed a large, soft goitre, considerable exophthalmos, tremor, tachycardia, etc. A diagnosis of Graves' disease was made, and after a four-week rest period, a one stage thyroidectomy was performed. Three-fourths of the thyroid lobe on each side was removed, and the boy made an uneventful recovery. After a protracted rest, he was permitted to resume his usual activities.

About one year from the time of his discharge I caught sight of him one evening hustling papers on a street corner. I hailed him, and as he approached my car, I noted his emaciation, exophthalmos, nervousness, and generalized fidgetiness. After questioning him, he promised to report at my office. He came a few days later, and examination revealed a state of hyperthyroidism only a little less severe than that for which he had originally consulted me. I again advised prolonged rest and abstinence from all exertion. He responded very well to this treatment but as soon as he would resume any of his normal activities, the symptoms would reappear. Thereupon he was again hospitalized and reoperated. At this operation all thyroid tissue was removed except that which was needed to protect the important structures. He made an uneventful convalescence, and after a three-month rest period was again permitted to carry on. Since the second operation he is able to perform his duties with only trifling discomfort.

As a rule, in those cases in which insufficient thyroid tissue is removed, the recurring symptoms are not as striking as the case just presented, nevertheless there is always a residual excit-

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ability and irritability, and a more or less constant tachycardia and fatigue.

Another glaring fault is the free administration of Lugol's solution to overcome low grade post-operative hyperthyroidism which may persist over a period of weeks, months, and even years. The fact that Lugol's solution is not curative for this condition, but may do actual damage, is frequently entirely ignored. It would be far better to seek and eradicate the cause of persistent tachycardia, tremor, fatigue, nervousness, hyperirritability, etc., than to attempt to temporize with compound tincture of iodine.

Another cause for the persistence of these symptoms is the failure to remove foci of infection such as infected teeth, tonsils, appendix and gall-bladder. The value of removing sources of infection is well illustrated in the following case:

R. M. was admitted 8-13-25 with a well defined Graves' disease. The B.M.R. was +46 per cent, the average pulse rate was 128, and the weight was 118 lbs. Nine days later, following the administration of ten minims of Lugol's solution t.i.d., the B.M.R. dropped to +18 per cent, the pulse rate to 92, and there was a six pound gain in weight. Thyroidectomy was performed. On 9-24-25, approximately one month later, the B.M.R.,, was +16 per cent, pulse 96, and the weight 126. About three months later, the B.M.R. was +19 per cent, pulse 98, weight about the same. There was evidently a low grade persistent hyperthyroidism. *X*-ray revealed three abscessed teeth. These were extracted on 12-10-25, and six weeks later, the B.M.R. was +3 per cent, pulse 70 per cent, and there was a gain of 14 lbs. in weight.

Results following removal of infected foci are not always as striking as in the above case, nevertheless the eradication of these infectious sources will convert what at first appeared a bad result into a very good one. I might quote other cases to prove this point, but the case presented is quite indicative.

The common error has been to completely disregard these foci, or what is more serious, to remove them before the thyroidectomy. In the presence of hyperthyroidism, even such a trivial operation as a tooth extraction, may give rise to the most severe thyroid reaction and overtax the ingenuity of the physician to prevent a fatal outcome. *Foci of infection should be removed after the thyroidectomy rather than before, that is, when the state of hyperthyroidism is under control.* I wish to be very emphatic about this point since I have seen several narrowly averted catastrophies following tonsillectomy during the active stage of hyperthyroidism.

Of at least equal and perhaps greater importance than the foregoing is a protracted rest period following subtotal resection of the thyroid gland. This feature of the treatment of hyperthyroidism gains in importance because it is so frequently under-emphasized. I know of no single factor which is more apt to disrupt or spoil what would ordinarily have been an effective cure than the failure to insist upon this rest period. I reiterate that thyroidectomy is only one link in the therapeutic chain necessary for the relief of hyperthyroidism, and unless followed by a rest period of preferably six months, many of the advantages of the operation will be nullified. Of all the steps in the treatment, this one is the most difficult to impress upon the patient. Either on account of economic urge or the feeling of well-being, or perhaps a combination of both, it is extremely arduous to acquire proper cooperation. Nevertheless it is of paramount importance that this rest period be enforced. Here too I might quote many cases illustrating this contention, but the following is sufficient to prove my point:

L. G. was discharged from the hospital in good condition. His pulse rate had receded from 140 pre-operatively to 80 post-operatively. The B.M.R. was +3 per cent, and he was steadily gaining in weight. At an examination about two months after his hospital discharge, he suddenly showed all the symptoms of a hyperactive thyroid gland. Being at a loss to account for this mysterious change, I questioned him closely, and learned, to my great surprise, that for the preceding week, in order to test his endurance, he had, several times each day, been running up and down a high flight of steps. The symptoms produced by this activity persisted for a long time and abated only after an enforced rest period. In another case, similar symptoms were produced by the too early resumption of ordinary household duties.

Further I wish to point out that there seems to be considerable confusion regarding the insurability of an individual who has once suffered from hyperthyroidism. This fact is attested by the numerous letters which I receive from insurance companies requesting information about applicants who have been thyroidectomized, and also soliciting an opinion as to whether or not such an individual makes a good insurance risk. Why there should be such hesitancy on the part of the insurance companies to accept these individuals I fail to understand. I believe that there is more than sufficient evidence at hand to demonstrate conclusively that if thyroidectomy is performed before the parenchymatous organs have been damaged, and if proper attention is given to the necessary therapeutic factors, there should be no appreciable diminution in the life span of these applicants.

Finally, I wish to submit the following conclusions:

The end results of hyperthyroidism vary in direct ratio to the consideration given not alone to the details of the pre-operative, operative, and immediate post-operative care, but also to a carefully supervised follow-up, involving a protracted rest period, the removal of all foci of infection, and the elimination of all deleterious factors.

Thyroidectomy is only one link in the therapeutic chain necessary for the cure of hyperthyroidism, and the chain includes Early Diagnosis; Pre-operative Preparation; Removing sufficient gland at operation; Removal of all foci of infection *after* the thyroidectomy; and insistence upon a Protracted Rest Period following operation.

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Diabetes Mellitus, Complications and Associated Conditions

CHARLES W. MCGAVRAN, M.S., M.D., F.A.C.P., and JAMES H. WARREN, B.A., M.D., Columbus

THIS paper is prepared, not with the idea of presenting anything new on the management of diabetes, but to bring before the physicians of Ohio the fact that diabetes presents to the medical profession a serious problem and a great responsibility.

Diabetes mellitus is a disease that has been recognized since the days of Celsus, or since the first century of the Christian era, yet today we are dealing with a new diabetes, largely because of the discovery of Insulin by Banting and Best in 1921. It is a new diabetes because those afflicted are living longer. If one examines the various statistical reports he will find, first, that the number of diabetics is increasing, and second, that fewer are dying in the lower age groups and more in the older groups, and third, that women make up the greater part of the increased number of diabetics. The following table is quoted from Hoffman,[1] who states that despite the success of Insulin treatment, the mortality from the dread disease is persistently mounting.

MORTALITY FROM DIABETES BY SEX, U. S. REGISTRATION AREA 1920 AND 1926

(Rate per 100,000)					Excess or Deficiency in Female Rate 1920	
	Male Rate		Female Rate			
	1920	1926	1920	1926		
15—19	5.5	4.2	3.7	3.7	Def.	1.8
20—24	5.6	3.0	4.6	3.2	Def.	1.0
25—34	6.1	3.2	5.2	3.6	Def.	0.9
35—44	8.4	6.4	8.1	7.9	Def.	0.3
45—54	19.1	18.9	27.2	30.9	Ex.	8.3
55—64	50.8	57.2	80.5	106.6	Ex.	29.3
65—74	93.3	125.5	133.6	196.6	Ex.	40.3
Over 75	128.4	159.3	128.5	178.6	Ex.	0.1
All ages	13.6	14.1	17.0	20.9		

The increase in the number of diabetic females can be accounted for by the facts, first, that more women are being examined than ever before; second, that the life expectancy is now well beyond the age of 40, and third, the tendency of women to gain in weight at about this age. That more women are diabetics is borne out by the experience of Joslin,[2] who states that until 1922, 55 per cent of his cases were males, and now they comprise only 45 per cent.

The increasing number of diabetics adds to the responsibility of the medical profession. This naturally brings up the questions of, what is this responsibility and how are we meeting it?

The first part of our responsibility lies in the prevention of the disease. Although we do not know the exact etiology, it is nevertheless true that more cases develop after the age of 40, and that 80 per cent of these unfortunate people are over-weight. It is, therefore, our duty to educate the public to the danger of obesity. Our next responsibility is to recognize the disease after it has developed. In a survey of our histories, we find that this is not always done.

After a diagnosis has been made, we are responsible for the proper treatment. Education is the keynote of proper treatment. The patient should be taught how to prepare a diet with the proper amount of carbohydrate, protein and fat; to examine the urine for sugar; to take Insulin if necessary, and to know its danger; and to recognize complications.

To tell a patient to eat gluten bread (with its high protein content) eggs, meat, fish, vegetables, etc., or to report to the office once or twice a week for injections of Insulin, or to draw the Insulin so far up in the syringe, with no instruction regarding units or reactions, is not proper training.

After we recognize the diabetes, our great responsibility lies in the prevention of the complications which are responsible for loss of life, eyes, hands, feet, legs, and which so often render a diabetic inefficient.

Prevention of complications implies a double responsibility, both on the part of the physician and of the patient. It is the duty of the physician to see that every diabetic, mild or severe, is given an adequate training, as outlined above, and warned as to the dangers of trauma and infection. The prevention of complications also rests upon the part of the patient, his willingness to cooperate and his ability to learn. A diabetic patient who is unwilling to cooperate with his physician will have complications. The one who is unable to learn very likely will have complications. The diabetic must report regularly to the physician for observance.

In the survey of our cases we find that today we see more diabetic patients with complications than ever before. This may be accounted for in several ways: first, the mild uncomplicated cases are being handled either properly or improperly by the family physician; second, many improperly handled cases develop complications; third, the average length of life in the skillfully handled is increased to an age at which arterial changes commonly take place. Properly treated diabetics should do well, and if they do not, should be reexamined for possible complications. This group of people should have all the advantages of a periodical health examination. Here is a wonder-

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ful opportunity to demonstrate the value of such a procedure.

In our work we have found the blood sedimentation rate a valuable aid in determining the presence of complications. Just recently one of the authors reported the findings in a series of 100 diabetics. We have followed the technique as described by Forman.[3] The Sahli hemoglobinometer tube is used and filled up to the mark 30 with a 5 per cent sodium citrate solution. Blood is then taken from a vein and the tube is filled to the 100 mark. The tube is then inverted several times and set aside. A reading is made at the end of an hour, also at the half hour if desired. Any reading between 100 and 80, or a drop of 1 to 20, is considered within normal range, but a reading below 80, or a drop of more than 20 in one hour, should be regarded as indicative of trouble. This test has been made in more than 1500 routine cases, as well as a series of 100 diabetics. No attempt will be made here to give details of our findings, as these will be reported elsewhere. Suffice to say that in diabetics, as in other patients, a normal reading practically excludes any complications, such as tuberculosis, suppuration, malignancy, pregnancy, or gangrene. The presence of a severe diabetes, manifested by loss of weight and marked glycosuria, a high blood sugar, and even an acidosis, does not give a lowered reading. If the above mentioned complications are present, a rapid sedimentation rate is found.

That we are dealing with a new diabetes is shown by an analysis of the complications. Before the days of Insulin, coma was the cause of death in 65 per cent of the cases, while now it accounts for 20 per cent. This number could be reduced to almost nil if the condition were detected early and proper treatment instituted. Development of coma in a recognized case of diabetes signifies failure on the part of the physician to properly instruct the patient, or failure on the part of the patient to follow instructions. Joslin[4] states: "A diabetic will not die of coma if he becomes firmly impressed with the necessity, when ill, of going immediately to a hospital, or (1) calling his doctor (2) going to bed (3) drinking a cupful of hot liquid every hour (4) taking an enema (5) keeping warm (6) having a nurse or someone to care for him in emergency and (7) above all this, continuing Insulin as long as sugar is present in the urine irrespective of the intake of food."

It has been our observation that the most common mistake is to omit the Insulin when vomiting occurs. The diagnosis of coma is usually easy, although in some cases it is ushered in with abdominal or chest pain, and a diagnosis of appendicitis, pleurisy or pneumonia is made. This happened recently in two of our present series of cases. The differential diagnosis between appendicitis and coma is sometimes difficult. In both there may be fever, vomiting, rigidity, abdominal pain and leucocytosis. According to Fitz,[5] it is safer to assume that a diabetic patient with sugar in the urine, pain in abdomen, nausea and vomiting, a flushed face and air hunger, has acidosis rather than appendicitis, and to use Insulin, then call the surgeon.

The treatment of coma is primarily the treatment of diabetes. Give plenty of Insulin, and most patients will recover, providing the circulation remains good. It is not the purpose of this paper to go into detail concerning treatment, but a patient in coma should be kept warm, given an enema, fluids by mouth, under the skin or by rectum; gastric lavage if vomiting, especially in children; varying doses of Insulin every hour or two until urine becomes acetone and later sugar free; plenty of carbohydrate for the Insulin to act upon; cardiac stimulants, and above all, personal service and supervision until the patient is out of danger. The latter is often neglected. Patients should not die of coma.

Arteriosclerosis has replaced coma as the principal cause of death in diabetes; over 50 per cent of the diabetic deaths occurring in four of Boston's larger hospitals were due to gangrene and infection of the lower extremities. Arteriosclerotic deaths should include those due to chronic nephritis, cerebral hemorrhage and chronic heart disease. Changes in the arteries occur very commonly in diabetes. Morrison and Bogan[6] have shown by *X*-ray studies that arteriosclerosis was present in 30 per cent of those who developed the disease between 20 and 25; 45 per cent for the 30 to 40 year group, and for almost all that developed the disease after 40. The cause of this is not definitely known. The question is a complex one, taking in the question of focal infections, and the metabolic residues of diets high in protein, cholesterol and fat. Since the advent of Insulin, it has been our practice to give a liberal amount of carbohydrate with hopes of maintaining a more complete oxidation of all waste materials. It is to be hoped that patients so treated will not be so prone to develop changes in the arterial system.

Every diabetic becomes a more severe diabetic in the presence of infection. Consequently, everything possible should be done to prevent infection, and the patient taught what to do in the event it occurs. If his diabetes has been so mild as not to require Insulin, in all probability it will be necessary for him to take Insulin during the infection. Or if he has been taking Insulin, it should be increased, depending upon his blood sugar and the amount of urine sugar. Our instructions to a diabetic in the event of infection are as follows: First, consult your physician. Second, keep quiet. Third, drink plenty of water. Fourth, adhere rigidly to your diet. Fifth examine the urine every four hours, following the method employed by Joslin[7] at the New Deaconess Hospital, Boston. When the test shows red, take 15 units of Insulin;

when yellow, 10 units; when green, 5 units; when blue, omit the Insulin. Sixth, in the event of fever go to bed and remain there until fever free. The care of a diabetic in the presence of an infection is important and must be considered seriously. We have known a mild diabetic in the presence of a slight infection to become a severe diabetic in 24 hours, and to be dead from coma in 48 hours.

Proper care of the feet should be a part of the instruction to every diabetic patient. This will help to eliminate many serious lesions involving the lower extremities. No abrasion of the feet, no matter how insignificant, should be ignored, as once a foot or toe becomes sore, it becomes important to decide whether one is dealing with infection alone, or whether the circulation is impaired. If only infection is present and the circulation is good, conservative measures can be tried, but if the blood supply is deficient, one must be not only bold but prompt. Delay may mean sacrificing the life of a patient in attempting to save a toe or foot. Once operation is decided upon, close cooperation between surgeon and internist is required, the diabetes must be treated before operation.

All pre-operative patients should receive a diet containing at least 100 grams carbohydrate daily, with adequate Insulin dosage. A few hours preceding operation, 20 or 30 grams of glucose in the form of orange juice, or glucose lemonade is given, and at the same time 10 or 20 units of Insulin administered. This assures the storage of glycogen in the liver, which is essential in diabetic surgery. Since the advent of spinal anesthesia, our results have been improved. Following operation the patient must be kept under close observation, adequate amounts of carbohydrate with Insulin being essential. In the new diabetes, all surgical procedures, such as appendectomy, cholecystectomy, etc., can be performed with results comparable to non-diabetics. To repeat, the essential being liberal amounts of carbohydrate and Insulin before and after operation, and the administration of an abundance of fluids, either by mouth, rectum or subcutaneously.

The automobile is figuring in the mortality rate of the new diabetes. With the increasing number of automobile accidents, head injuries and all kinds of fractures and lacerations are common. Like infection, trauma increases the severity of the diabetes. All injured patients should have frequent examinations of the urine for sugar and acetone, or a diabetic acidosis may be overlooked. Four of our recent cases were of this type, three of them were in serious acidosis. Two of these gave no previous history of diabetes.

The discussion of the new diabetes would not be complete without mentioning the juvenile group. Formerly the span of life of these children was short, but now it is lengthened into an undetermined number of years. The handling of a juvenile case is difficult and requires very close supervision. They require more protein than the adult. It has been our practice to give a liberal amount of carbohydrate, and adjust the Insulin accordingly. It is next to impossible to keep this type of patient sugar free at all times. Children are susceptible to infections, and sometimes even the most trivial thing will decrease the tolerance. They are prone to acidosis and coma, which often appear very quickly. Only prompt recognition will prevent serious complications. This group is making history, and if properly treated, should live for years, no one knows how many.

SUMMARY

1. The increasing number of diabetics adds greatly to the responsibility of the medical profession.

2. Education of the patient is the keynote of success in treatment, and also in the prevention of complications.

3. Coma is an emergency and requires constant attention on the part of the physician.

4. Treat gangrene with the idea of saving the life of the patient instead of an arm or leg.

5. The sedimentation rate is an aid in detecting the presence of complications.

6. Frequent examinations of the urine should be made in all accident cases.

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BIBLIOGRAPHY

1. Hoffman, Frederick L., The Spectator, Nov. 7, 1929, pages 19 to 21.
2. Joslin, E. P. Nelson Loose Leaf Medicine, Vol. 3, pages 55-115.
3. Forman, Jonathan, The Sedimentation Rate of Erythrocytes, Journal Laboratory and Clinical Medicine, XII. No. 4, page 373, Jan., 1927.
4. Joslin, E. P. Lea & Febiger, Philadelphia, 1928, Ed. 4.
5. Fitz, Reginald, Diabetic Coma, The New England Journal of Medicine, November, 1929, 201: 967-973.
6. Morrison, L. B. and Bogan, I. K. Calcification of Vessels in Diabetes, Journal American Medical Association, 92-1424. 1929.
7. Joslin, E. P. Nelson Loose Leaf Medicine, Vol. 3, page 109 I.

NEW BOOKS

Physiological Chemistry. A Text-Book and Manual for Students. By Albert P. Mathews, Ph.D., Carnegie Professor of Biochemistry, the University of Cincinnati. Fifth Edition. Illustrated. William Wood and Company, New York, publishers.

Cross-Sections of Rural Health Progress. Harry S. Mustard, M.D. Report of the Commonwealth Fund Child Health Demonstration in Rutherford County, Tennessee, 1924-1928. The Commonwealth Fund, Division of Publications, New York.

A Chapter of Child Health. Report of the Commonwealth Fund, Child Health Demonstration in Clark County and Athens, Georgia, 1924-1928. The Commonwealth Fund, Division of Publication, New York.

Grow Thin on Good Food. By Luella E. Axtell, Funk and Wagnalls Company, New York, publishers.

The Prevention and Treatment of Infantile Eczema

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IT is not my intention to add another classification to the already over-classified subject of Infantile Eczema. Neither do I intend to quote statistics, for the prevalent ideas and knowledge of infantile eczema is so diversified and unsettled that I consider statistics of little value. I simply want to bring before you certain points which I consider important in the prevention and early treatment of eczema in infants.

I have been particularly interested in the subject of infantile eczema for several years. I believe that important laboratory and research work can best be carried out in the large clinics and medical centers, but the results of this work can only be tested out successfully by the practicing physician who is able to follow his cases and see the end results.

Infantile eczema has always been considered a bugbear to the medical profession. The average physician will prescribe a little ointment of some kind, weaken the feeding, and tell the mother that after the baby is about eleven or twelve months of age the eczema will disappear. Usually there is little benefit and the mother goes the rounds until the baby is worse or its development is so seriously affected that it may never be normal. I think as does Talbut[1] that eczema cases should be handled by the pediatrist. However, he should always stand ready to cooperate with the dermatologist who understands skin pathology and treatment, and with the allergist whose knowledge of skin testing and allergic manifestations is very specialized. I have no more pleasant relationship with any patients than I have with parents of eczematous infants. When such cases are seen early and before chronic changes, infection, or malnutrition has taken place, it is only the exceptional case that cannot be rendered innocuous or mild or cannot be completely cured. Many mild cases can even be cured in a few days while the more severe ones can usually be made mild. The cases which have heretofore been classed by the term exudative diathesis and then allowed to exude indefinitely are certainly extremely rare in my own experience.

Dr. Stokes[2] (in whose department at the Mayo Clinic I received my post-graduate training in skin diseases), in a recent article has made this statement: "Expect less of sensitization tests, metabolic determinations, blood chemistry and physiological and laboratory workups and more from full history, and experienced appraisal of type and quasi-empirical management." I am glad that so experienced a dermatologist has made such a statement for it allows me now to proceed without apology.

WATER INTAKE

I have yet to see the hospital nursery where sufficient water is given to the newborn infant unless definitely ordered by the physician. The usual routine is to either give the infant no water or give it once or twice a day. There is usually no notation of the amount given and frequently when it is offered the infant does not take any. Often the infant receives only one-half to 1½ ounces of breast milk every three or four hours, which amount of fluid is scarcely ideal even for a premature infant. Beyond this there is the pernicious method often in vogue of giving the infant no 2 A. M. feeding which further curtails the fluid intake.

But what has all this to do with eczema? Simply this, that the baby attempts to carry off its waste matter through the urine. However, due to the scant excretion not all of the waste products can be dissolved and passed off. There is also a diminution of sweat which ordinarily bathes the skin of the infant. This sweat which normally should be soothing, contains a large amount of waste matter and is irritating. In this way an early basis is made for the development of infantile eczema. Occasionally I have seen real cases of eczema begin before the baby left the hospital. Many times I have noted beginning seborrhoea or mild skin irritation which cleared up quickly when fluid was increased. However, the skin is seldom observed carefully while the baby is in the hospital, and usually the condition has not existed long enough to produce noticeable skin irritation until some time after the baby goes home. Frequently an intelligent mother realizes that baby needs plenty of water and the condition is righted. Also most mothers find that baby cries during the night and they proceed to give the 2 A. M. feeding and the condition is again righted. On the other hand, many mothers give the baby little or no water. In such cases especially if the breast milk is concentrated and high in fat, carbohydrates or protein; if the artificial feeding is incorrect; or if the baby has been sensitized to protein through the mother or the food, then eczema will occur.

I therefore believe that many cases of infantile eczema have their origin in insufficient fluid intake. To substantiate this I might state that I have several eczema families in Toledo where the baby has been prevented from having eczema at all or else the case has been of the mildest type. Furthermore I have never had any but very mild cases of eczema develop in my practice where I have had control of the baby and cooperation of the parents. As to the amount of fluid

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given I believe that every infant should be given one to three ounces of water at some time between two and three hours after at least four feedings. If given after two hours, food will have left the stomach and there will be no food vomited. Also if it is never offered later than three hours after the feeding it will not interfere with the following feeding and will leave the stomach quickly. I believe that all infants should be on a four-hour schedule. I think that infants should be awakened for water. If they are awakened they will sleep much better at night and need only be awakened for the 2 A. M. feeding. Usually at about two months of age the 2 A. M. feeding may be omitted. Saccharin may be added to the water or if the baby is underweight or not gaining properly there is no objection to adding a monosaccharide such as glucose. There should be no such thing as a baby refusing to take its water. I have never seen an infant unless it had congenital heart disease or atresia of the oesophagus, etc., that could not be made to take water, using a medicine dropper if necessary.

It is important to emphasize here that a high carbohydrate intake or cereal in the diet has a tendency to hold water in the tissues. Such retention of fluid has an unfavorable effect on infantile eczema. It is for this reason that I consider it unwise to raise the carbohydrate above 5 per cent and also unwise to use cereal or cereal waters in the diet of young infants. Mobilization as against immobilization of body fluids is of benefit in the prevention of infantile eczema.

INFECTIONS

Acute infections such as ordinary head colds, tonsillitis, otitis media or acute bronchitis have a marked tendency to initiate or cause a recurrence of infantile eczema. During such illnesses the secretion of digestive juices is inhibited. Digestive function is especially impaired at the beginning of such illnesses when the fever is high. However it is more or less interfered with during the entire course of the illness. There is also a breaking down of the body fat in the effort to keep the blood sugar at a constant level. The breaking down of fat releases acids which compromise to a greater or less degree the acid-base equilibrium. In most cases the acidosis is not marked and ordinarily goes unnoticed. However to the careful observer there is a definite increase in the acidity of the urine, sweat and saliva. There is also a definite change in the skin. The skin at first is often shiny and red. Intertrigo may appear and redness and even ulceration at the penile meatus is frequent. Patches of eczema near the mouth from the saliva are common. A similar sequence of affairs may occur from improper feeding or during teething. Often wrong feeding, teething and infection are all present at the same time and serve to complicate the picture.

I have brought up this question of infections because I believe that they are probably the most potent factor in the causation of infantile eczema.

TREATMENT OF INFECTIONS

Regardless of the nature of the infections and notwithstanding specific or other necessary measures used there are certain principles of treatment which are often lost sight of but which are extremely important if infantile eczema is to be prevented. During the first two or three days of illness if the fever is high, it is often necessary to eliminate food entirely including milk. Milk will usually raise the fever and will frequently start vomiting. It is a fallacy to believe that infants must have food when they are sick. If they are given a mono-saccharide such as dextrose or glucose, an alkali, and if the fluid intake is kept above two ounces per hour, they will hold their weight and strength better, their temperature will be lower and their skin will show less irritation than if food is given. Fruit juice is added to the dextrose solution, usually on the second day after the period of gastric disturbance is over. With a drop in the temperature a skim-milk formula is added.

ALKALI

I consider the acid-base equilibrium in infancy so important a mechanism that about three years ago I gave up the use of litmus paper. I now use the dye tests and make an exact hydrogen-ion concentration determination on every specimen of urine by the use of a color chart. This takes only a few seconds longer to do and allows of no guess work. Since I have used the hydrogen-ion determination I have learned a great deal more than I could ever have learned with litmus or with titration methods. I am now convinced that alkali is seldom administered correctly. It is usually given only once or twice a day and in insufficient doses. A dose of five grains given two or three times a day will be ineffectual in changing an acid urine below a P. H. of 6 to the more favorable alkalinity of P. H. 7. Again even a larger dose of alkali is only effective for a few hours and if not repeated before the effect has worn off may even have the harmful effect of stimulating acid production. I find that a prescription containing sodium bicarbonate and sodium or potassium citrate each grains 5 to 10 and given every four hours is usually about the amount necessary to obtain quick alkalinization. The dose however is dependent on many factors such as the age of the infant, and the acidity of the urine before treatment. Once the P. H. of 7 or higher is obtained the dose can be cut down and less alkali is necessary to maintain alkalinization. Sodium bicarbonate is the strongest and quickest alkalinizer. If Alka-Zane or Citrocarbonate are given the dose must be much larger. I consider alkaline treatment of extreme importance in some cases of infantile eczema. Its use is especially efficacious during general infections to prevent the development of eczema or its

relapse. Also in cases of eczema where the urine is strongly acid, alkali is beneficial and can be continued indefinitely. I have seen no harm when alkali is administered for weeks or even months provided the urine is watched. Ideally, however, alkali should be administered only so long as it is necessary to stabilize the acid-base mechanism of the body. When eczema is complicated by local infection or pyelitis, alkali is indicated and should be continued until these complications are removed. Alkali should not be discontinued suddenly. In many cases the beneficial effect of alkali can only be determined by success or failure through trial. Alkali besides neutralizing acid has the beneficial effect of mobilizing body fluid and promoting diuresis. Most bacteria seem to have less detrimental effects when alkali is administered. Empirically in my own experience infants seem to feel better and take fluids more readily under alkaline treatment.

I do not want to leave the impression that I think alkaline treatment is a cure-all. I simply believe it to be important in infancy. With increasing age the use of alkali becomes less important. Perhaps further work may show that there is some connection between disturbances of the acid-base equilibrium and infantile eczema. Certainly no one can deny that eczema has a tendency to clear up at a time when acidosis becomes less common and alkali of less importance.

CATHARTICS

In any effort to prevent infantile eczema the elimination of cathartics is in order. I know of no better way to produce skin irritation or to affect adversely an existing eczema than to give cathartics such as castoria, calomel, castor oil or mineral oil preparations. Such treatment interferes with normal digestion and disturbs the acid-base equilibrium. Carthartics are never necessary in infancy and an appreciation of this fact will do much to promote infant welfare. I have little trouble in advising mothers that if at times the stools are dry and hard or bulky this simply means that the infant is utilizing his food well. On the contrary if the stools are thin, loose and too frequent, the infant is excreting valuable elements from the food. By increasing the fluid intake and making suitable changes in the diet a satisfactory stool can usually be obtained. The use of small enemas and suppositories do not have any of the ill effects of cathartics and serve to aid and train the infant. Such treatment is logical and will not lead to irritation and colitis such as is produced by cathartics.

SKIN TREATMENT

The dermatological aspects of infantile eczema have been studied carefully by Scholtz[3] and others. The few external applications of real value can be learned in a short time. From the standpoint of prevention and early treatment external applications are for the most part unnecessary unless it is desirous of using a simple lubricant to keep the skin soft and in perfect condition. Absolute cleanliness of course is essential. Diapers must be changed frequently and if necessary should be impregnated with boric acid or bichloride of mercury to prevent ammonia dermatitis. Only cotton garments should be used. Ultraviolet light is of definite benefit in early cases of eczema. When given in low dosage of less than the erythema dose itching is relieved, the skin condition improved and development favorably influenced. In severe cases by this measure moist eczema and infected eczema are benefited as are complications such as otitis media and pyelitis. Huldschinsky[4] advises ultraviolet in infantile eczema.

VIOSTEROL

One of the most important recent developments especially from the pediatric standpoint is that of irradiated ergosterol. Through the courtesy of Mead Johnson & Company, who supplied me with their produce for use before it was placed on the market, I have had experience with its use in several hundred infants. Heretofore in early infancy in order to prevent rachitis large doses of cod liver oil have been necessary. In many instances this high caloric fat has been sufficient to upset digestion and metabolism and initiate eczema. In some cases it used to be necessary to stop cod liver oil or cut down the amount with the result that while the eczema improved, rachitis developed. At present with viosterol the dose is so small that it is never necessary to discontinue it even in illness. After five months of age usually a sufficient dose of cod liver oil can be given without upsetting digestion and producing skin irritation provided it is replaced by viosterol if indisposition, illness or skin irritation occurs.

I am cognizant of the work of Barnes, Brady and James[5], who found cod liver oil superior to viosterol as shown by calcium and phosphorus determinations. I have also read the recent clinical study of Sanctis and Craig[6], who concluded that either the present prophylactic dose of viosterol is too small to prevent rickets or else rickets is not due to a deficiency of Vitamin D alone. While I will not deny the scientific value of such studies I am by no means convinced that sufficient work has yet been done to settle this question. In a clinic which I have for colored infants, the routine early use of viosterol is showing striking results in preventing rickets—a state of affairs which was not apparent when cod liver oil was used. Another important fact is that mothers who will not cooperate in giving cod liver oil will give viosterol religiously. I find that the small size of the dose, the willingness of the infant to take it and the increased cleanliness associated with its use appeal to even the most uneducated mother. Also viosterol is a standard preparation while cod liver oil is often carelessly bought and sold. Such considerations do not enter into a scientific discourse but they are important in everyday practice.

In my own practice I try to guard infants carefully against rachitis which I consider the most serious of diseases affecting as it does development so early in life. Where viosterol is dropped into the mouth and not mixed with the food or feeding I have found no instances where if started soon after birth a dose of more than ten drops a day was necessary to prevent clinical rachitis.

COMMENTS

It is not the purpose of this paper to discuss infant feeding in relation to infantile eczema. However, I would like to state here that I believe the well balanced diet sufficient in the principals, high enough in calories to bring about an average gain in weight and with added food accessory factors to permit of no deficiency is the fundamental principle in preventing and curing infantile eczema. Such a balance cannot usually be obtained with proprietary or synthetic infant foods as well as it can be obtained by a formula and a system where changes can be more readily made to suit the individual needs of the infant. Neither can it be obtained by over-feeding with acidified milk. A few years ago I was very enthusiastic about the use of acid milk. At present I can think of no worse way of feeding infants routinely. With this method one can be sure to give the infant an excess of calories by feeding a concentrated milk. Many infants fed on acid milk are not particularly sensitive to protein nor is their skin particularly sensitive but they are forced to digest and take care of much more protein than the body needs. It is for this reason and probably also because of the presence of acid that eczema so frequently occurs when the infant is on acidified milk. In infants on acid milk when there is a family history of eczema and when the infant appears to be sensitized to the casein of lact-albumin of cow's milk, I have repeatedly seen severe infantile eczema which was quickly cured or improved by changing to a diet low in protein and without acid. Where acidified milk seems to be indicated I consider lemon juice as the best acidifier because while it serves the purpose of a buffer, it is really an alkalinizer and renders the urine alkaline and non-irritating.

I have said very little about the question of food allergy in infants. From the work of Schloss[7], Blackfan[8], Ratner[9], Vaughan[10], and others there can be no doubt that this is an important factor in the causation of infantile eczema. When the infant is on the breast it may at times be necessary to control the diet of the mother as suggested by O'Keefe[11]. However as a general rule this factor can practically be ignored in early infancy and its bad effects can be definitely minimized by carrying out the principles I have outlined. As a further safeguard all milk should be boiled. This has a tendency to denature the protein and if after boiling, the coagulated albumin is skimmed off some of the lact-albumin will be removed. Boiled milk also has a finer curd, is more easily digested and less frequently leads to intertrigo and skin irritation. Gerstley[12] has well stated that the skin condition is improved by bringing the child to the best possible state of nutrition.

SUMMARY

1. Sufficient fluid intake beginning from the time of birth is exceedingly important if infantile eczema is to be prevented.

2. Special attention to water intake, diet regulation and treatment must be observed to prevent skin irritation during infections.

3. There is a noticeable connection between infantile eczema and the acid-base equilibrium in infancy. Where alkalinity cannot be maintained by dietary measures the proper use of alkaline drugs is beneficial.

4. Cathartics are to be avoided in infancy.

5. Viosterol has distinct advantages over cod liver oil. Its discovery is an important advancement and its use is vital in the prevention and treatment of infantile eczema.

6. Acidified milk often initiates an infantile eczema. The well-balanced diet sufficient in principles, high enough in calories to bring about an average gain in weight and with added food accessory factors is fundamental.

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REFERENCES

1. Talbut—Medical Clinics of North America. January, 1928. Page 985.
2. Stokes—American Journal of Medical Sciences. Volume clxxix, No. 1. age 694. January, 1930.
3. Scholtz—Archives of Pediatrics. Volume 44. Page 602. 1927.
4. Huldschinsky—Klinische Wochenschrift. Page 71. Jan. 8, 1929.
5. Barnes, Brady and James—American Journal of Diseases of Children. Page 45. January, 1930.
6. Sactis and Craig—A. M. A. Volume 94. No. 17. Page 1285. April 26, 1930.
7. Schloss and Worthen—American Journal of Diseases of Children. Volume 16. Page 357. 1916.
8. Blackfan—American Journal of Diseases of Children. Volume II. Page 441. 1916.
9. Ratner—American Medicine. Volume xxiii. Number 11. Page 868. Nov., 1928.
10. Vaughan—Journal of Laboratory and Clinical Medicine. Volume xiii. No. 1. Page 24. Oct., 1927.
11. O'Keefe—Boston Medical and Surgical Journal. Volume 190. Page 413. March 6, 1924.
12. Gerstley—A.M.A., Volume 80. No. 16. April 21, 1923.

DISCUSSION

C. L. RUGGLES, M. D., Cleveland: One writer reports a single case of eczema in which the cure was apparently due to viosterol. Occasionally patients may be sensitive to cod liver oil. Frequently patients with eczema on other feedings, clear up when placed on SMA, a cod liver oil containing milk. The small dosage of viosterol and its palatability are desirable features.

Many cases of exudative diatheses respond well to ointments without any change in diet, water intake, or hygiene.

The phase of eczema most interesting to me is the allergic aspect. Theoretically, skin testing with a view to determining and eliminating the offending protein or proteins, should give good results. Failure may be due (1) to incomplete testing; (2) skin may fail to show allergic response by cutaneous tests for proteins which cause allergic reactions when ingested. The in-

fant may show skin reaction to substances not in his diet. It is important to note these in consideration of future additions to the diet. It is possible that such substances may cause no disturbance when fed, but at least they should be tried cautiously.

The elimination from the diet of proteins found by skin test or actual feeding to cause the allergic response is not simple. I deplore indiscriminate weaning in the attempt to cure eczema. Several experiences with cases of marked idiosyncrasy for other milks sufficed. Severe attacks of vomiting, high fever, generalized edema, hay fever symptoms, or asthma were worse than the eczema. By the time the physician or the parent is convinced that the child has been tossed from the frying pan into the fire, the breast is usually dried up. Except in extreme cases, I believe the baby should be kept at the breast and the skin condition otherwise treated. At least the child should be tested for sensitiveness to the proposed feeding, if weaning is to be carried out.

In the light of present knowledge of eczema, it appears unlikely that any one regimen will be sufficient for prevention or treatment. A single measure, whether dietary, local application, drug, protection against local irritation, some type of irradiation, faith, hope, or prayer, may be successful in some single cases or small group. The majority, however, require some combination of these measures, determined by the physician's personal experience, judgment, intuition, and good luck. The difficult cases need every trick in the bag and the utmost patience of doctor and parent.

The cases of eczema which develop in patients under the routine care of the pediatrician rarely develop a severity equal to that of those which come to him on account of the skin condition. The pediatrician necessarily has a fair acquaintance with skin conditions in infants and some familiarity with the best methods of the dermatologist. He is the one upon whom the diet supervision finally falls and should share with the allergist an adequate conception of the foreign proteins and various phases of allergic response. He sees daily hereditary influence in and outside of the field of allergy. The pediatrician recognizes the factor of constitution and should be the best equipped to prescribe the proper hygiene. In other words, while not a specialist in every angle of the study of infantile eczema, the pediatrician possesses the best combination of the necessary attributes and the widest perspective.

I wish to express my appreciation of Dr. Mebane's interesting paper. Any innovation, with prospect of success, in the treatment or prevention of eczema is most welcome. I confess a feeling of especial inferiority toward the subject of eczema in general and in particular toward the phases just presented. Comment therefore will be inquisitive.

A proper water balance must be maintained for the exudative child as well as for the normal infant. On the other hand, the French writer, Ribadeau-Dumas, and others have shown that the water content of plasma and tissues (kidney, liver, and muscle) is higher in the eczematous than in the normal individual. The same French authority claims that resorption of the physiological serum in the exudative is slower than in the normal. Some cases of moist eczema can be made dry with a relatively dry diet. Hence it would seem that no more than enough water to supply physiological needs should be furnished.

During most infections in cases of eczema under my observation, most have improved temporarily, presumably due to lessened food intake.

Sandels, a German writer, reports excellent results in the treatment of exudative infants with the use of Sheer's hydrochloric acid milk. Lactic acid and citrous acids employed to acidulate milk have an alkaline fate in the body. On the basis of desirable alkalinity such milks should favor the acid-base equilibrium advocated.

We can only agree that in general cathartics are to be avoided in infancy. I am unfamiliar with their relation to eczema.

Industrial Accidents

PAUL A. DAVIS, A.B., M.A., M.D., Akron

THE presentation of this paper is made possible only by the use of statistics which have been recorded by the hospital of the Goodyear Tire & Rubber Co. over a period of ten and twelve years.

Only those accidents which have occurred within the confines of this great industry are tabulated, and those disease conditions (known as industrial diseases) which are produced by industrial hazards.

What do we mean by industrial hazards? This is not a hard question to answer, for all industrial hazards are defined by law and interpreted by the Industrial Commission. In general, industry concedes that any condition that is caused by a definite hazard or any accident that occurs while the man is at work, excluding "horse play", is an industrial accident and should be compensable. The Industrial Commission definitely states this in regard to all accidents, and has a definite list of conditions about which there is no question. Occasionally there may be some discussion between the industry and the Industrial Commission as to the advisability of listing this or that condition as compensable, but it is usually settled so as to satisfy both concerned. The conditions in the factories of Ohio are better than in many states. I have visited many other states and have observed some conditions that are hazards and some pathological conditions in some of the workers that do not exist in our state.

What is the cause of this? There is only one answer. The Commission has made no provision for these conditions in their laws and as a result industry has ignored them.

Some industries have frowned on the Industrial Medicine program but if you will make a survey of the leading industries of the country, you will

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find that they look with pride on the service rendered their workmen and can show much money saved by their medical department. Industrial accidents and diseases vary in different industries and states according to the structure of the compensation laws, but they should consider that any pathological condition that is caused by industry is an industrial accident.

According to the compensation laws of Ohio we are not in doubt as to what constitutes an industrial accident, but there is often much doubt and controversy as to whether the condition found in an individual is an industrial accident or a diseased condition, or whether or not the condition was caused by his occupation.

The Industrial Commission's definition of industrial accidents and hazards is as follows:

Sec. 1465-68. Every employee mentioned in section 1465-61, who is injured and the dependents of such as are killed in the course of employment wheresoever such injury has occurred, provided such injury was not purposely self-inflicted, on or after January 1st, 1914, shall be paid such compensation out of the state insurance fund for loss sustained on account of such injury or death as is provided for in the case of other injured or killed employees, and shall be entitled to receive such medical, nurse and hospital services and medicines and such amount of funeral expenses as are payable in the case of other injured or killed employees.

Every employee mentioned in section 1465-61 who is injured and the dependents of such as are killed in the course of employment, wheresoever such injury has occurred, provided the same was not purposely self inflicted, on or after January 1st, 1914, shall be entitled to receive either directly from his employer as provided in section 1465-69, or from the state insurance fund such compensation for loss sustained on account of such injury or death and such medical, nurse and hospital services and medicines and such amount of funeral expenses in case of death as is provided for in sections 1465-69 to 1465-87 inclusive.

Any member of a partnership, firm or association composed of two or more individuals, and is paid a fixed compensation for services to such partnership firm or association, and the dependents of such as are killed in the course of employment, wheresoever such injury has occurred, provided the same was not purposely self-inflicted, shall be paid such compensation and benefits as are provided in the case of other injured, diseased or killed employees by this act, provided such partnerships, firm or association includes in the payroll furnished by it to the Industrial Commission of such member and pays the premium based thereon.

(As amended O.L., 220. Effective July 14, 1925.)

Section 1465-68a. Every employee who is disabled because of the contraction of an occupational disease as herein defined, or the dependents of an employee whose death is caused by an occupational disease as herein defined, shall on and after July 1st, 1921, be entitled to the compensation provided by sections 1465-78 to 1465-82, inclusive and section 1465-89 of the General Code, subject to the modification hereinafter mentioned; provided that no person shall be entitled to such compensation unless for ninety days next preceding the filing of a claim for compensation the employee has been a resident of the State of Ohio, or for ninety days next preceding the filing of a claim for compensation has been employed by an employer required by the workmen's compensation law of Ohio to contribute to the occupational disease fund of Ohio for the benefit of such employee, or to compensate such employee directly under the provisions of section 1465-69 of the General Code.

The following diseases shall be considered occupational diseases and compensable as such, when contracted by an employee in the course of his employment in which such employee was engaged any time within twelve months previous to the date of his disablement and to the nature of any process described herein.

SCHEDULE

Description of Disease or Injury	*Description of Process*
1. Anthrax	Handling of wool, hair bristles, hides and skins.
2. Glanders	Care of any equine animal suffering from glanders; handling carcass of such animal.
3. Lead poisoning	Any industrial process involving the use of lead or its preparation or compounds.
4. Mercury poisoning	Any industrial process involving the use of mercury or its preparation or compounds.
5. Phosphorus poisoning	Any industrial process involving the use of phosphorus or its preparation or compounds.
6. Arsenic poisoning	Any industrial process involving the use of arsenic or any of its preparation or compounds.
7. Poisoning by benzol or by nitro and amido-derivatives of benzol (dinitro-benzol, aniline and others).	Any industrial process involving the use of benzol or a nitro or amido-derivative of benzol or its preparation or compounds.
8. Poisoning by gasoline, benzine, naphtha or other volatile petroleum products.	Any industrial process involving the use of gasoline, benzine, naphtha or other volatile petroleum products.
9. Poisoning by carbon bisulphide	Any industrial process involving the use of carbon bisulphide or its preparations or compounds.
10. Poisoning by wood alcohol	Any industrial process involving the use of wood alcohol or its preparations.
11. Infection or inflammation of the skin on contact surfaces due to oils, cutting compounds or lubricants, dust, liquids, fumes, gasses or vapors	Any industrial process involving the handling or use of oils, cutting compounds, or lubricants, or involving contact with dust, liquids, fumes, gasses or vapors.

12.	Epithelioma, cancer or ulceration of the skin or the corneal surface of the eye due to carbon, pitch tar or tarry compounds.	Handling or industrial use of carbon pitch or tarry compounds.
13.	Compressed air illness	Any industrial process carried on in compressed air.
14.	Carbon dioxide poisoning	Any process involving the evolution or resulting in the escape of carbon dioxide.
15.	Brass or zinc poisoning	Any process involving the manufacture founding or refining of brass, or the melting or smelting of zinc.
16.	Manganese dioxide poisoning	Any process involving the grinding or milling of manganese dioxide or the escape of manganese dust.
17.	Radium poisoning	Any industrial process involving the use of radium and other radio active substances, in luminous paint.
18.	Tenosynovitis and Prepatellar Bursitis.	Primary Tenosynovitis characterized by a passive effusion or crepitus into the tendon sheath of the flexor or extensor muscles of the hand, due to frequntly repetitive motions or vibrations, or pre-patellar bursitis due to continued pressure.

(109 O.L., 185. Effective August 4, 1921).

Section 1465-68c. No compensation shall be awarded on account of disability or death from disease suffered by an employee who, at the time of entering into the employment from which the disease is claimed to have resulted, shall have wilfully and falsely represented himself as not having previously suffered from the disease. Compensation shall not be awarded on account of both injury and disease, except when the disability is caused by such disease and an injury, in which event the commission may apportion the payment of compensation provided for in sections 1465-79 to 1465-82, General Code, inclusive, between the funds as in their judgment seems just and proper. If the employee is suffering from an occupational disease and an injury, and the Industrial Commission of Ohio can determine which is causing his disability, it shall pay compensation therefor from the proper fund.

(109 O.L., 185. Effective August 4, 1921).

From the above laws there is very little doubt as to what constitutes compensable cases, but the greatest difficulty lies in the proof. A few employees apply for compensation and some receive it for disabilities not due to occupation.

The statistics quoted here are based entirely on legitimate cases, and represent all cases that have reported to the Hospital and Dispensary.

Total number of cases treated during the last nine years	1,862,732
New injured cases (lost time)	23,968
New sick cases (lost time)	24,834
Injured cases (no lost time)	325,373
Sick cases (no lost time)	565,532
Patient days in hospital	11,393
X-Ray, examinations and dental visits	911,920

The following statistics on injured cases with lost time include both the number of cases and treatments and are classified as individual visits to the hospital.

Years 1922 to 1929	Total
Fractures treated	6445
Strained backs	3621
Strains	5316
Tenosynovitis	615
Infections	1941
Dislocations	117
Traumatic amputation	634
Hernias	981
Bursitis	129
Occupational dermatitis	72
Arthritis	112
Periosititis	29
Varicocele	31
Hydrocele	15
Eye cases	2040
Punctured Wounds	500
Neuritis	11
Myositis	49
Contusions, lac abrasions	15037
Burns	1084
Synovitis	80
Total	38,854

No records are kept on sick cases as these are referred to their own physician. Sickness or slight injuries which do not prevent work are not classified except as to hospital visits, but a record is made of all injuries except slight abrasions and cuts, for future reference. Disabilities due to toxic substances are not classified as sickness but as industrial accidents and are treated as compensable cases.

Patient days in the hospital are classified as follows:

	Total Patient Days	No. of Cases	Average Patient Days
Fractures	3014	150	20.9
Hernias	2520	180	14.
Burns	673	56	12.
Miscellaneous Operations	1335	108	12.3
Contusions & Lacerations	1075	88	12.2
Infections	1190	74	16.
Sprains	407	27	15.
Lead Poisoning	31	3	10.3
Analine Poisoning	2	1	2.
Total patient days for 8 years			11,393
Total ward cases for 8 years			804
Average patient days			14.15

GENERAL METHODS OF TREATING MINOR ACCIDENTS

This of course depends on the policy of the employer. If an adequate medical organization is maintained, such injuries are taken care of at the industrial dispensary by physicians and nurses. If only first aid is rendered at the factory it is necessary to send the employee to an outside doctor, which means a loss in time or money or both in many cases to both employee and employer. In some cases a physician visits the plant dispensary for only an hour once a day and examines the injured, or he is on call for any serious accidents. If the size of the industry warrants it a well organized staff with hospital facilities should be maintained. The medical organization should cooperate very closely with the safety first department, compensation bureau and the supervisional departments, and by thus having a good working system it is possible to benefit to the greatest extent both employee and employer. The following

causes, in my experience are responsible for the greatest number of accidents.

1. Falling material
2. Handling material
3. Lifting
4. Bumping against material
5. Tools and machines which are improperly protected with safety devices
6. Trucks
7. Burns
8. Material on floors
9. Falls due to slippery and poor floors, dark stairways poor shoes, physical disabilities and carelessness.
10. Poor near vision results in many eye accidents as well as many major accidents.
11. Failure to wear goggles when working on grinding or chipping jobs
12. Improper illumination
13. Exposure to chemical compounds due to improper ventilation and protection
14. Physical disabilities.

The following is a composite of the tire industry for last 2¼ years.

CAUSES OF ACCIDENTS—Figures based on statistics over a period of 27 months. Average percentage per month is as follows:

Bias machine	0.02%
Stairs	0.04%
Windup	0.96%
Press	0.96%
Mills	1.91%
Infections	1.91%
Material on floor	1.91%
Stripping tires	1.91%
Burns	2.9 %
Tire machines	2.9 %
Molds	2.9 %
Eye accidents	5.75%
Trucks	5.75%
Bump V S material	5.75%
Falls	6.71%
Misc. machinery	7.67%
Lifting	7.67%
Tools	10.55%
Handling material	13.53%
Falling material	18.3 %

When accidents occur it should be the duty of the supervisor to obtain information as to the cause and nature of the accident and direct the injured employee to the hospital at once.

Here he should be examined by competent physicians, *X*-rays taken, laboratory work done; and the best treatment given that is obtainable, and hospitalized if necessary with the best of nursing service.

The expense should not be considered in giving this service to an injured employee.

In case of burns and injuries caused by chemicals it is always necessary to know the substances which have caused the injury. This knowledge is of prime importance for burns caused by chemicals are treated in one way and those by thermal agents in another way.

In minor accidents, if it is the opinion of the physician that the individual can do light work or continue with his own work, he is permitted to return to his department and instructed to return to the hospital for redressing as often as is deemed necessary. If the accident is a major one he is kept in the hospital for observation and treatment and later should his condition be such that he can go home he is permitted to do so, if not he is kept in the hospital. Automobile service is maintained for transporting injured employees to and from the hospital.

During the last eight years we have had 11,393 patient days and the following conditions are enumerated as being the chief causes for hospitalization.

1. Hernias
2. Fractures
3. Burns
4. Eye injuries
5. Strained backs
6. Infections
7. Major traumatic injuries to soft parts.

Excluding hernias which are operated on, the largest factor in industrial accidents which cause loss of time is fractures.

The table on page 842 shows the number of fractures over a ten-year period.—Reprint with additions from article by author in Journal A.M.A., September 8, 1928.

COST OF INDUSTRIAL ACCIDENTS

It is a very difficult matter to arrive at the actual cost of a treatment in an industrial hospital, but the average cost can be obtained by knowing the yearly hospital expense and the number of patients treated. This average over a period of years has fluctuated between 33 and 35 cents a treatment. However this is not the total cost to the industry for an accident even though the man returns to work, for a certain expense must be added by the safety first department for the cost of investigation of the accident. This expense is charged to the labor department.

The average cost to industry for cases confined in their own hospital is certainly a variable quantity. However some sort of an average can be arrived at if the following factors are taken into consideration.

Elimination of the original cost of the space occupied by the hospital:

Average cost per meal @	$ .50 per day	$1.50
Compensation per week @	18.75 per day	$2.68
Average medical and nursing care (average for 12 years)	per day	.99
Av. cost per day with compensation		$5.17
Av. cost per day without com.		$2.49

The annual report of the Bureau of Hospitals of the Department of Health of the State of Ohio for the year 1929 has shown that the average per patient day cost for all types of Hospitals from 1 to 501 plus beds vary from $6.44 to $4.28 per day.

The average of all Class G hospitals has been shown to be $6.44. Since industrial hospitals are not separately listed, but fall under the heading Class G hospitals the average of $6.44 will apply to them. If the industrial hospital falls in Class G and has one to 25 beds this average is $6.80. Most industrial hospitals fall within these limits and therefore we may use this figure as a general average for this type of hospital.

Cases not confined to the hospital if treated every day are averaged over eight years as follows:

		Number	Days Lost	Average per Case, Days	
Skull		11	215 (8 died)	19.5	
Mandible		5	132 (1 died)	26.4	
Nasal		9	100	11.3	
Malar		4	52	13	
Zygoma		3	33	11	
Ribs		90	1,516	14.9	
		1	multiple fracture of chest and arms; died 3 hours		
		1	fracture of 5 ribs, mandible and seventh dorsal vertebra; died.		
Vertebrae		7	518 (2 died)	83	
Pelvis		---	---	---	
Coccyx		4	287 (1 died)	71.6	
Pubes		1	259	259	
Pubes and ischium		1	173	173	
Ilium		1	105	105	
Clavicle	right	7	288	41.1	
	left	8	294	36.7	38.9
Scapula	right	3	177	59.0	
	left	3	135	45.0	52.
Humerus	right	7	524	74.8	
	left	14	1,315	93.9	84.5
Radius	right	41	1,823	44.5	
	left	48	1,832	38.2	41.3
Ulna	right	17	1,139	61.0	
	left	19	1,620	85.2	73.1
Colles'	right	6	284	47.3	
	left	6	207	34.5	40.9
Radius & Ulna	right	16	1,508	94.2	
	left	18	1,472	81.7	87.9
Radius, ulna, humerus		1	93	93.0	
Multiple fracture of right arm		1	140 (died)	140.0	
Femur	right	8	1,916	239.5	
	left	5	883	176.6	208.1
Tibia	right	10	717	71.7	
	left	9	810	90.0	80.8
Fibula	right	17	762	44.8	
	left	4	267	66.7	55.7
Tibia and fibula	right	12	1,602	133.5	
	left	3	311	103.6	118.5
Malleoli	Exterior	2	74	37.0	
	Interior	3	169	56.3	46.6
Oscalcis	right	6	1,027	171.1	
	left	3	197	65.6	118.2
Pott's	right	5	266	63.2	
	left	6	458	76.3	64.7
Pott's and multiple tibia left, comp. and infected		1	1,000	1,000.0	
Patella		11	995	90.4	
Tarsals		27	987	32.8	
Metacarpals		126	4,110	32.6	
Metatarsals		221	7,307	33.0	
Carpals		33	896	27.1	
Phalanges of feet	1. 593				
	2. 204				
	3. 128				
		925	21,228	22.9	
Phalanges of hand	1. 691				
	2. 196				
	3. 158				
		1,045	28,129	27.7	
Total of all fractures with time lost		2,826	90,115	Av. 31.88	

From 1922 to 1928, 100 patients with fractures were hospitalized for 1,809 days, averaging 18.1 days.

Chip fractures and fissured fractures in which no time was lost	428	------		------
Total	3,254	------	Av.	27.3

Since 1928 there have been 50 more fractures which required hospitalization changing the average hospital days from 18.1 days to 20.9 days.

Compensation	@	$2.68 per day
Treatment Daily	@	.33 or .35 per treatment
Total of		$3.01 or $3.03 per day

If transportation is furnished this adds further expense. You can readily see that trying to arrive at the exact cost per patient in an industrial hospital on an individual or piece work basis is very complicated. The budget system is the most desirable method, for example the statistics for 1929 are as follows:

Total number of treatments and examinations	238,904
Total operating expense of hospital and dispensary	$ 93,254
Average cost per individual	$ .39

The cost to the individual is his loss of the difference between his wages and compensation plus his insurance. The average workman makes about $6.00 per day.

In a large industrial organization there are a few cases in which there is some doubt as to their compensability. A few of these are as follows:

1. Cetrain irritative dermatoses
2. Myositis of various muscles
3. Arthritis
4. Certain eye conditions
5. Pulmonary conditions
6. Infections and malignancy
7. Certain neuroses
8. Toxic conditions.

From our experience during the last 15 years the lumbar region has caused the geratest controversy. On analysis and examinations the largest percentages of so-called strained backs are not due to trauma but to a preexisting arthritis or a chronic infectious myositis. Complete examination will in most cases reveal chronic infected tonsils, abscessed teeth, infected para nasal sinuses, diseased prostate, nephritis, infected gall bladder, chronic appendix, an abnormal intestinal digestion, or some other focal infection which is the exciting cause for an arthritis or myositis. There are cases on record where industry has had to compensate for hypertrophic arthritis of known infectious origin.

What is there to do in such cases? There is only one solution and that is to exhaust all the known treatments for such conditions and attempt to obtain a cure before some permanent disability results. It is often very difficult to convince a jury that this condition is due to an infection and not to trauma. The percentage of these cases can be reduced by a thorough examination of employees and the proper placement of them on jobs. It is folly to place a tall thin back type of worker on a job where the leverage of his lift is out of proportion to his own measurements. Our experience with another condition which has caused much controversy, namely hernia, has shown that practically 100 per cent are congenital. We have tried to find a traumatic hernia but operation has always shown an old hernia sack which could not have developed between the time of the stated injury and the operation.

We have not entered into much controversy regarding hernia but have given the employee the benefit of the doubt and have given him a truss or have operated on him. He is compensated on an average for six weeks and hospitalized at no expense. When his convalescent period is up he is placed on light work for a sufficient length of time to insure a complete recovery.

Occasionally certain dermatoses are points for controversy but a thorough examination and investigation solves the question.

METHODS OF DECREASING ACCIDENTS

The prevention of accidents is a big task and needs the co-operation of many departments.

1. Medical department.
2. Safety first department.
3. Super-visional department.
4. Personnel and labor departments.
5. Engineering and construction departments.

The functions of each of these departments are as follows:

1. The medical department furnishes a physical report and advises as to the defects found and as to what kind of work the employee is best adapted. If his vision is defective he should not be placed on certain jobs; if there is a predisposition to hernia or other defects he should be placed accordingly. In other words, the medical department attempts to place a man on a job that is compatible with his physical make up and where he will encounter the least chance for injury.

2. Safety First Departments have a profound duty to perform. They must inspect all machinery and mechanical processes and provide for the proper guards and safety devices to insure against accidents. They must investigate all industrial hazards and see that they are corrected.

3. Super-visional departments. These departments must investigate all jobs, study their nature, instruct the employee in the proper method of doing his work with the least strain and stress. They even go into details and study the motions of the individual in doing certain operations in order to see that no lost time or unnecessary motions are present. Moving pictures are often taken of certain operations and then later viewed at a slow rate of speed in order to determine lost or awkward motions. Knowledge of one's work makes it much more enjoyable and less hazardous.

4. Personnel and labor departments. It is the duty of these departments to ascertain the mental and educational qualifications of an individual as well as his past experiences on different jobs. It is their duty to keep a satisfied personnel for a satisfied employee promotes co-operation and unless a co-operative relation exists between the worker and the management no industry can prosper long. The old time "hard boiled" boss is a thing of the past and this has come to an end chiefly through the efforts of the close co-operation that has been established between the management and the employee by means of the personnel and labor departments.

5. The engineering and construction departments usually do not come in direct contact with the employee, but their work is valuable and is done on recommendation of some of the other departments, for example the furnishing of proper

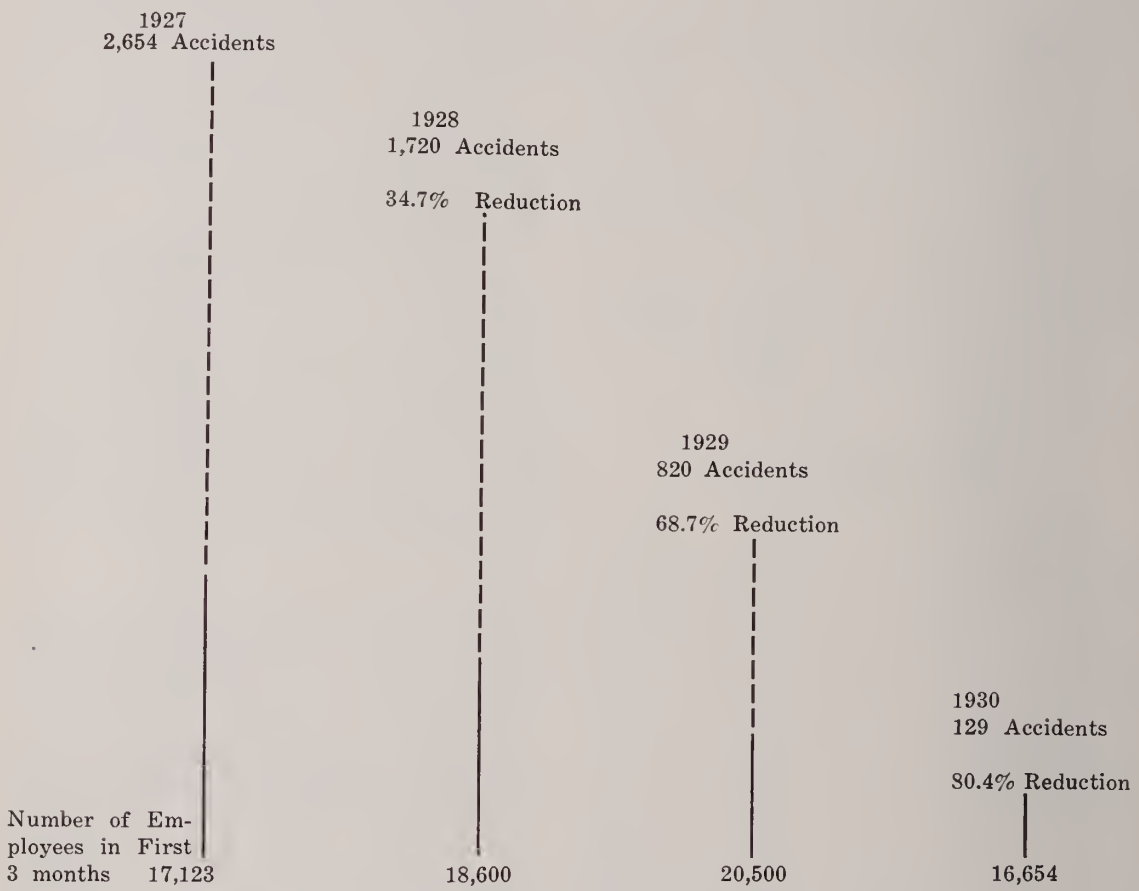
illumination, ventilation and non-defective buildings. Dark, gloomy and poorly ventilated buildings certainly produce unfavorable psychological and physical reactions in the individual. Efficiency of the human mechanism is aided by proper environments. Industrial vitamins produce industrial growth, and without these we deteriorate. Competitive co-operation as seen in safety campaigns is a great factor in reduction of accidents.

The following diagram shows the reduction of accidents since 1927 by the close co-operation of the above listed factors and forces.

Number of days lost by employees since the year 1927. Caused by accidents.

Year	Days Lost	Average number of Employees
1927	34,554	17,669
1928	21,626	18,687
1929	17,954	19,335
Total number of days lost	74,134	

Showing reduction of accidents since 1927.



Solid lines represent reduction of accidents in the first three months of each year.

REITERATION AND CONCLUSION

The limitation of time and space prevents one from going into details on a subject such as this, for fractures and hernias alone could be discussed at great length. It has been my endeavor to bring to your attention statistics over a period of years and the relative costs involved in treating industrial accidents where the industry maintains its own hospital and medical staff. A study of the charts and statistics will show that the close cooperation established between the employee and the super-vision has resulted in a great decrease in industrial accidents and lost time to the employee. This is beneficial to both the employee and the employer, not only from the monetary viewpoint but from the good will that it promotes.

From our experience over a period of years I am convinced that a well equipped hospital and dispensary is one of the necessary units of any industry. It should have the following departments:

1. Medical
2. Surgical
3. Orthopedic
4. X-ray
5. Physiotherapy
6. Dental
7. Clinical laboratory
8. Research Department.

An adequate number of beds must be maintained and this can only be determined by the individual industry.

The per capita cost will vary in the different industries but as an average it will be remarkably

low when compared to the general or special hospital costs. Industrial accidents cannot be entirely eliminated but the percentage for a given number of employees can be so greatly reduced that it becomes a controllable factor in production control work according to the time, thought and emphasis given it.

The financial loss to the employee is amazing. For example, from 1922 to 1928 in one large factory alone there was a total loss of 90,115 days on account of fractures. If the average wage is $6.00 a day and we disregard compensation and insurance this amounts to $540,690. This is only one item and if all the time lost due to injuries and sickness was tabulated it would amount to millions of dollars lost to the employees. The loss to the employer is great also, not only in compensation but in lost production.

One must not overlook the great economic loss to society.

The Use of Local Anesthetic in the Reduction of Fractures

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IN the majority of cases an anesthetic of some sort is absolutely necessary in order that a fracture may be reduced properly. This is not done merely to relieve pain, for no matter how skillful the surgeon, or how brave the patient, sufficient muscular relaxation cannot be obtained in most cases without an anesthetic. One of three types may be employed. First, inhalation of gas, ether or chloroform; second, a spinal anesthesia or a nerve blocking anesthetic with novocaine; or, third, a local anesthetic with novocaine. There are several difficulties encountered when using a general anesthetic. In the first place the patient is, as a rule not prepared for a general anesthetic. Another reason why inhalation anesthetics are not entirely satisfactory in fracture cases is that although the patient may be thoroughly put to sleep, muscular relaxation does not always ensue. That is, the anesthetic works first by deadening the higher centers of the central nervous system and last of all causes relaxation of the muscles of the limbs. The anesthetist, judging from his experience with abdominal and other types of cases in general surgical operations, will feel that he has the patient sufficiently "under", whereas, as a matter of fact the patient is not sufficiently relaxed to permit the proper reduction of the fracture. This, of course, is not always true and many fractures have been successfully reduced under the ordinary inhalation anesthetic, but we do not believe it is applicable as universally as is the spinal or local anesthesia.

Another problem appears after the reduction has been made and the casts or splints applied. During the reaction stage following a general anesthetic there are often incoordinate movements of the muscles and because of this the good position of the fragments is often lost. Also in the semi-conscious state the patient may toss about increasing the danger of breaking the cast or loosening the splints resulting in the loss of the reduction.

As is well-known, a satisfactory reduction is not always accomplished with the first attempt. No one cares to leave the fragments in a poor position for any length of time, neither does one desire to give another general anesthetic within twenty-four hours after the initial one. An immediate *X*-ray check-up is always advisable. A patient under a general anesthetic is naturally uncooperative and is difficult to move, which creates a problem when the fracture room and *X*-ray are not in the same vicinity.

For fractures of the lower limb a spinal anesthesia may be used, unless the patient is in too great shock. In the fractures of the upper limb a brachial anesthesia can be used, but we do not approve of it as a routine for it is not without danger.

The use of local anesthesia in fractures was first used extensively by Böhler in Vienna, who has used it in many types of cases with gratifying results. A safe anesthetic acting primarily at the site of injury causing a relaxation of the surrounding muscles with the patient still able to cooperate, sets an ideal stage for the attending physician.

In the vast majority of cases the local injection of novocaine is sufficient for reduction. One must remember that the reduction of a fracture differs from a surgical operation in that, in the fracture case the trauma has already occurred, whereas, in an operation the trauma is to be made. Therefore, in the fracture case knowing where the injury is, it becomes relatively easy to eliminate the pain and in our opinion once the pain has been completely eliminated, muscular resistance disappears. There are, of course, some exceptions to this rule but generally speaking this is true.

THE TECHNIQUE OF THE USE OF LOCAL ANESTHESIA IN FRACTURES

A small area of skin over the fracture is cleaned with benzine, alcohol, and ether, and an area about 1 cm. square is painted with iodine. Using a 20 c.c. syringe with a hypodermic needle

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attached, a small skin bleb is made with 2 per cent novocaine or procaine. About 1 or 2 c.c.'s of novocaine is injected into the subcutaneous tissue. A Wassermann needle is then placed on the syringe and an attempt made to strike the hematoma, which procedure has been found to be comparatively easy. However, in three or four cases it was necessary to use the fluroscope and place the point of the needle between the fragments before the hematoma was located. As soon as the needle enters the hematoma blood appears in the syringe. Between 15 and 20 c.c.'s of the 2 per cent solution is then slowly injected in this area, retracting the plunger several times during the procedure. The needle is then removed and the wound cleansed with an alcohol sponge. After waiting about five minutes the manipulation can be carried out.

If, as in the case of the forearm, both bones are broken, it is wise to inject twice, using a smaller amount, say 10 c.c.'s into each fracture. In children the full 20 c.c.'s is not always used, whereas, in a large adult with a large hematoma such as in the thigh, perhaps 25 to 30 c.c.'s might be used.

Placing the needle in the hematoma is an important step. With a fracture there is usually a tearing and a varying amount of striping off of the periosteum from the bone. This, with the injury to the surrounding soft parts, and with the separation of the fragments freeing the contents of the marrow cavity, causes considerable bleeding about the injured area. When the 2 per cent novocaine is injected into one portion of this hematoma it will disfuse through it bathing the torn edges of the periosteum and injured muscles, giving anesthesia where it is most needed, that is, where the pain sensation has been elicited and where pain will be created by manipulation.

It is true that with the introduction of the needle a simple fracture has been converted into a compound one. However, if the aseptic technique is used the risk is slight. We have encountered no infections in our series and none have been reported to our knowledge.

We and our associates have used this method in 207 cases and have found it almost universally successful. In the whole series there have been only two rank failures. One was in a twelve year old boy with a fracture of the middle of the right femur. This child was quite apprehensive. The other failure was in the case of a complete backward dislocation of the ankle with fractures of the tibia and fibula. We were able to render the fracture painless by local injections, but were unable to reduce the dislocation until a spinal anesthetic was resorted to. In only two cases have we had any sign of novocaine intoxication. One was in a twelve year old child with a fracture of the middle of the humerus. Fifteen c.c.'s were injected and the child became somewhat paler and vomited several times within the following two hours. However, there was no difficulty in reducing the fracture or applying the splints. The other case was also of the humerus but in an adult who weighed over 200 pounds. This patient went into mild shock and also vomited, but again no difficulty was experienced with the reduction or in applying the splints. Both cases were able to leave the hospital on the following day.

We have used this method in compound fractures but it is more difficult and the novocaine must be injected into the tissues around the wound.

We have found that this method is not quite so successful in impacted fractures. That is, fractures surrounding which there is little or no hematoma. In this type it is necessary to place the needle right at the fracture line often with the aid of the fluroscope. Several cases have not been successfully reduced the first time and have been reinjected on subsequent days and done over again. This has never caused any difficulty. However, it is far better practice to get a check-up *X*-ray immediately and if the reduction is not good to do it over at once while the novocaine is still working. In one eight year old girl it was necessary to reduce the fracture three times before our *X*-rays showed us that we had obtained good position. With the time consumed going up and down stairs to the *X*-ray room and developing films, this took over an hour and a half, and yet the anesthetic held perfectly all this time.

This type of anesthetic has not been entirely satisfactory in dislocations. In one dislocation of the elbow the reduction was made but the patient complained of severe pain and there was considerable muscle spasm. In another case a posterior-lateral dislocation of the elbow a reduction was made after injection of about 35 c.c.'s of novocaine. Before injection the patient complained of excruciating pain with any attempt at manipulation, and there was marked muscle spasm. Following the injection manipulation caused much less pain and the muscle spasm, though present, was decreased. A satisfactory reduction was made.

The ages of the patients in this series vary from a two year old child with a supra-condylar fracture of the humerus to a 91 year old woman with a comminuted fracture of the head of her right tibia.

In children the results are most gratifying. The transformation of a frightened, screaming, uncooperative bundle of antagonism into a smiling cooperative patient is one of the most gratifying experiences one will encounter in this procedure.

The following table of 207 cases are all of those done by us or our associates in the Cincinnati General Hospital or the Good Samaritan Hospital, Cincinnati, Ohio. No cases are included except those in which there was displacement of fragments, and in which some manipulation was

necessary to complete the reduction. The cases listed as successful are those in which there was no pain or muscle spasm after the injection was made. Those listed as fair are cases in which the spasm was so slight that reduction could be carried out easily. The two failures are cases in which it was necessary to resort to another type of anesthetic.

FRACTURES REDUCED UNDER LOCAL ANESTHETIC

Type	Ages	No.	Successful	Fair	Failures
Neck of Femur	55-75	11	11		
Shaft of Femur	5-50	22	19	2	1
Tibia & Fibula	11-91	30	30		
Fibula	48	1	1		
Ankle	Ages not given	7	6	1	
Ankle Fracture with Marked Dislocation of Astragulus	25 & 55	2	1	0	1
Os-Calcis	Ages not given	3	2	1	
Tarsals & Toes	16 & 25	2	2	0	
Patellar or Olecranon Open	20-69	5	5	0	
Neck Humerus	14-78	14	14		
Shaft Humerus	8-50	18	15	3	
Lower End Humerus	2-20	16	13	3	
Upper End Ulna + Dislocation Head of Radius	Ages not given	2	1	1	
Shafts of Both Bones of Forearm	5-24	39	37	2	
Colles	16-62	29	28	1	
Colles + Dis. Wrist	50	1	1		
Epiphysis Wrist	14	1	1		
Fingers & Metacarpals	14-60	4	4		
Totals		207 or 100%	191 or 92.27%	14 or 6.76%	2 or .97%

It is only fair to state that both of the failures were among our earliest cases, and it is also true that the 6.76 per cent of cases listed as fair were also among our earlier cases, or in cases in which the injury had taken place some days before we saw the patient.

In conclusion we wish to extend our thanks to Dr. John A. Caldwell, Director of the Fracture Service, Cincinnati General Hospital and to the Staffs of the *X*-ray Departments of the Cincinnati General and Good Samaritan Hospitals, for their very helpful cooperation.

409 BROADWAY.

NEW BOOKS

Gonococcal Infection in the Male. By Abr. L. Wolbarst, M.D., Urologist and Director of Urologic Clinics, Beth Israel Hospital; Consulting Urologist, Central Islip State Hospital, Manhattan State Hospital, Jewish Memorial Hospital, and Madison Park Hospital. Second Edition, completely revised and enlarged. With 140 illustrations, including seven color plates. The C. V. Mosby Company, St. Louis, publishers.

Infant Nutrition. A Textbook of Infant Feeding for Students and Practitioners of Medicine. By William McKim Marriott, B.S., M.D., Professor of Pediatrics, Washington University School of Medicine; Physician in Chief, St. Louis Children's Hospital, St. Louis. Illustrated. The C. V. Mosby Company. St. Louis, publishers.

Acute Intestinal Obstruction Resulting From Meckel's Diverticulum With Fibrous Cord

E. H. CHAPIN, M.D., Columbus

Johann Friedrich Meckel, a German anatomist who lived during the period of 1781 to 1833 was the first (in 1808) to direct attention to the presence of a congenital defect in the human body, which bears his name. However, the first comprehensive and thorough description of the condition is accredited to Ruysch.

Meckel's diverticulum is an abnormal pouch of bowel structure as a rule located on the free border of the ileum about 30 cm. proximal to the ileocecal valve. It is believed to originate from the vitelline duct as was first explained by Meckel and is present in 1 to 2 per cent of all human bodies. According to Van Hook and Kanavel, from 5 to 7 per cent of occlusions in the vicinity of the cecum are due to Meckel's diverticulum. The presence of a terminal ligament or fibrous cord-like band is believed to result from the remains of the obliterated blood vessels. The following case report, in detail, is quite typical of the condition.

CASE REPORT

L. F., a white male, twenty years of age, strong and robust in appearance, six feet tall and weighing 180 pounds, was admitted to the hospital, January 2, 1929. He was an only child, born of healthy parents, with a history of periodical attacks of acute abdominal pain accompanied by nausea and vomiting since early childhood, the last one of which occurred about one year previous.

December 31, 1928, late in the afternoon, he returned home complaining of the above mentioned symptoms. Home remedies including a cathartic were administered all of which were promptly vomited. The pain, nausea, and vomiting increased in amount and frequency. The family became alarmed and January 1, 1929, at 5 a. m., twelve hours following onset of symptoms, called in attendance their family physician who reported the patient's condition as follows: Temperature 98.6, pulse 78, blood count, leukocytes, 11,000. A differential blood count was not made. The doctor further stated that the patient was vomiting a yellowish fluid frequently. No abdominal distention or tenderness was present but the patient complained of cramp-like abdominal pains.

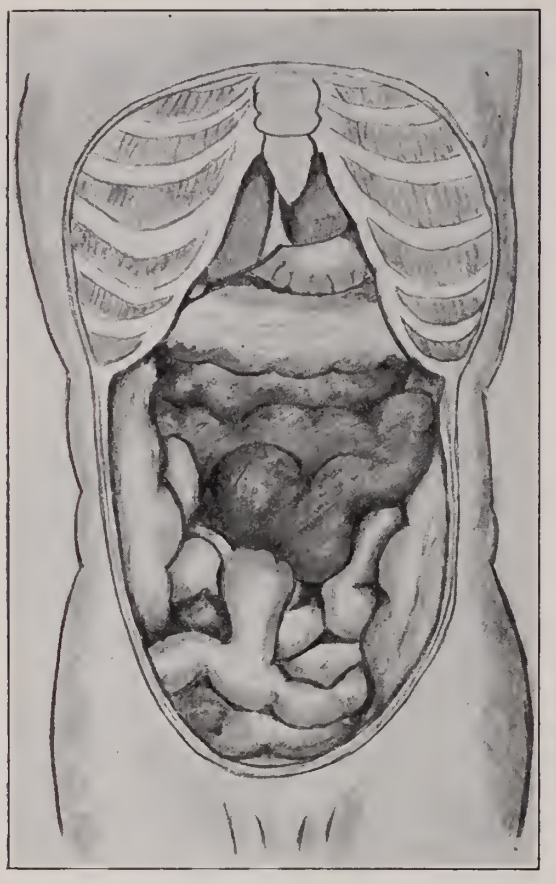


Fig. 1. Showing the Meckel's diverticulum and fibrous cord obstructing the bowels.

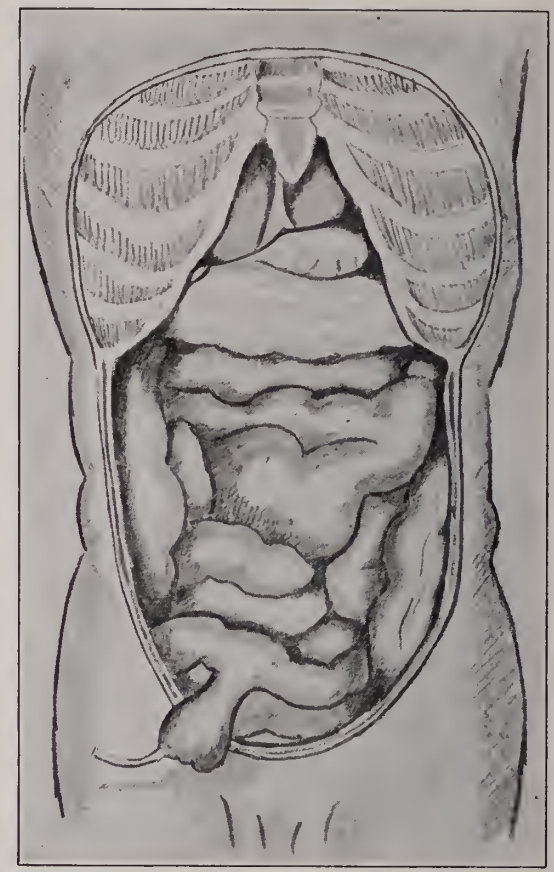


Fig. 2. Showing the diverticulum and bowel released following severance of cord.

January 1, 1929, at 2 p. m., seventeen hours following onset of attack, the attending physician examined the patient for the second time and reported the following symptoms: Temperature 99.4, pulse 88, differential blood count—leukocytes 16,400, polymorphonuclears 93 per cent, eosinophils 1, lymphocytes 1; the abdomen was distended, slight tenderness was evident in the lower right quadrant, vomiting had increased in amount and frequency, character of vomitus the same. The patient was complaining of more severe abdominal pain.

January 2, 1929 at 2 a. m., twenty-nine hours following onset of attack, I examined the patient in consultation. Temperature was 99.2, pulse 90, and general appearance was that of an individual not extremely ill. His mentality was alert and he did not seem to be in extreme pain. The tongue was slightly coated, he frequently vomited several ounces of yellowish fluid. The abdomen was distended having the appearance of an inverted cone. Dullness, changing with the position of the patient was present in both flanks. Slight tenderness was palpated above and to the right of the umbilicus. It was impossible to see, feel or hear peristalsis. Soon following palpation of the abdomen, the patient vomited 1500 c.cm. of dark greenish fluid which emitted a feculent odor.

The patient was taken immediately to the operating room and the abdomen opened through a long right paramesial incision. Inspection revealed the peritoneal cavity filled with a transudate of straw colored fluid; the small intestines were considerably distended and showed a dark bluish discoloration. Located on the free border of the ileum 30 cm. from the ileocecal valve was a Meckel's diverticulum (Fig. 1) measuring 4.5 cm. in width and 11 cm. in length. It was uniform in caliber and composed of the same structure as the normal intestinal tract with no evidence of a valve at its base but a free and direct communication between it and the bowel. At its distal end was attached a cord-like band the size of one's little finger which measured from 8 to 10 cm. in length and was attached at its proximal end to the root of the mesentery, overriding several loops of small bowel and constricting them in such a manner as to produce a complete obstruction of the bowels.

OPERATIVE PROCEDURE

The cord was severed freeing the obstruction and mobilizing the diverticulum (Fig. 2.) Three straight intestinal clamps were then applied at the base of the diverticulum (Fig. 3-A) and it incised with an electric cautery between the distal and adjacent clamps (Fig. 3-B), disposing of the diverticulum. The distal one of the two remaining clamps was removed and a single continuous catgut suture applied in the groove left by the clamp (Fig. 3-C). Finally the proximal clamp

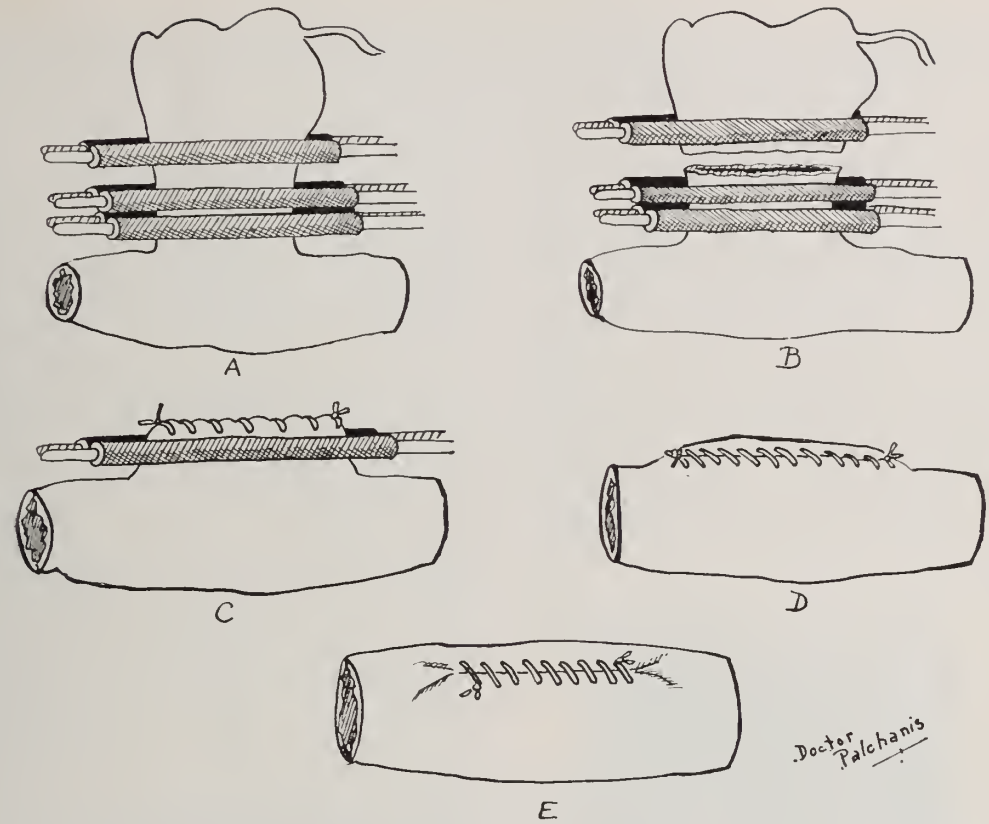


Fig. 3. Showing (a) application of the three intestinal clamps following severance of cord, (b) the diverticulum divided by electric cautery between the distal and adjacent clamps, (c) the first suture line invaginating bowel with clamp in position, (d) second suture line, and (e) third and final suture line.

was removed and the bowel closed with two rows of continuous sero-muscular stitches (Fig. 3-D and E) so as to invaginate the gut and establish its normal lumen.

The patient had a very stormy convalescence for the first three days following operation. He vomited frequently and required gastric lavage and hypodermics of pituitrin. However, after three days, peristalsis was established and the bowels evacuated. Thereafter, convalescence was uninterrupted and the patient left the hospital in apparently normal condition January 15, 1929.

SUMMARY

This case has been reported with the intent of emphasizing to the practitioner the relative frequency of Meckel's diverticulum as an etiological factor in intestinal obstruction. While the condition is seldom diagnosed as a cause of intestinal obstruction preceding laparotomy, the diagnosis is not unusually difficult providing one is familiar with the characteristic symptoms in intestinal obstruction due to Meckel's diverticulum. Knowledge of a past history of gastro-intestinal disturbance induced by diverticulitis or partial obstruction, the less acute or more gradual development of the obstruction, the location of the tenderness, as a rule, to the right and adjacent to the umbilicus, and the inverted cone-like distention of the abdomen should at least attract attention to the probability of Meckel's diverticulum as a cause of the intestinal obstruction.

327 E. STATE STREET.

Gumma of the Eyelid

H. J. PARKHURST, M.D., Toledo

MODERN textbooks on syphilis and ophthalmology generally make very brief mention of nodular syphilid or gumma of the eyelid, and the condition is usually not described. An occasional case has been reported. Igersheimer[1] describes it, as well as gummatous syphilitic tarsitis, occurring in acquired and congenital syphilis. An excellent brief description of the condition has been given by Zeissl[2] in his small book on syphilis, published in 1864, as follows: "Serpiginous syphilitic ulcers involve the eyelids not uncommonly, extending through the breaking down of nearby nodules. Stellwag noted

1. Igersheimer, Josef: Syphilis und Auge, Berlin, Julius Springer, 1918.
2. Zeissl, Hermann: Lebrbuch der Constitutionellen Syphilis, Erlangen, Ferdinand Enke, 1864.

such syphilitic ulcers, which had extended from the frontal region to involve the upper eyelid. The resultant scars may produce ectropion by adhesion to the frontal process. There are also cases in which syphilitic ulcers extend to the eyelids from the nose and cheeks. But the eyelid alone may be involved on its outer cutaneous surface or on its free border. These (ulcers) arise from gummas in the form of slightly sensitive, firm, dark red nodules, situated in the outer skin of the eyelid or in the subcutaneous or submucous tissue, easily mistaken for a developing furuncle, hordeolum or chalazion. After the resultant breaking down of the nodule, the diagnosis is facilitated, *ex comitantibus et iuvantibus*, by the form and depth of the ulcer. Such gummas of the eyelids may be solitary, or sometimes multiple, involving the whole palpebral margin. It is also conceivable that such gummas involving the submucosa of the eyelid could destroy the mucous surface and the cartilage of the lid."



In view of the comparative rarity of involvement of the eyelid alone, and the difficulty of its diagnosis, the following case is reported:

M. F., a salesman, aged 21, was referred to me on March 4, 1930, by an ophthalmologist, on account of suspected epithelioma of the right lower eyelid. Six months previously a small, red, firm, non-tender nodule had appeared on the palpebral margin near the external canthus. Gradual enlargement had followed, the process extending medially and healing laterally. After three months the patient had consulted the ophthalmologist. The process being intact, a provisional diagnosis of chalazion had then been made, followed by incision and persistent ulceration. Ultraviolet had been applied in an unsuccessful attempt to stimulate healing of the ulcer. Along most of the medial two-thirds of the lower right palpebral margin, on the cutaneous surface, there extended a rather deep, fairly regular, punched-out ulcer, with a fairly smooth, pale, glairy base. The surrounding area was dull red, moderately swollen and considerably infiltrated. There were no eyelashes in the affected lid. Two smooth, pea-sized, white scars were found in the balano-preputial furrow, and several firm, non-tender, hazelnut-sized lymph nodes were palpated in the right inguinal region. No other lesions were found anywhere on the skin or visible mucous surfaces, and no other superficial lymph nodes seemed to be enlarged.

The youth of the patient and the sharp outline of the ulcer were against a diagnosis of epithelioma. Moreover, there was no suggestion of a pearly border, as ordinarily found in basal-cell epithelioma, which may occur in this location. The ulcer did not have the undermined edges of a tuberculous process, and no apple jelly nodules could be seen through the diascope. The fairly regular, sluggish, very slightly painful ulcer was suggestive of a syphilitic process, and since no enlargement of the regional lymph nodes could be palpated, it was considered to be a gumma rather than a chancre. The patient was then questioned, and admitted having had a penile sore about eighteen months previously, which he had treated by applications of "Blue stone". He had received no medical treatment, and he had observed no secondary eruption.

No spirochetes were found in dark-field examinations. (Only zinc oxid ointment had been applied to the lesion.) The Wassermann and Kahn reactions of the blood were strongly positive. A tentative diagnosis of gumma was then made and test treatment was started. No arsenical drugs were used, for there was still a possibility of epithelioma and arsenic stimulates epithelial proliferation. One grain of mercuric chlorid was injected intramuscularly once a week, and 15 grains of potassium iodid were given three times daily. In eighteen days the ulcer had healed completely, and the infiltration had greatly subsided. This was considered sufficient confirmation of the diagnosis of gumma.

CONCLUSIONS

Gumma of the eyelid, while apparently rare, should be briefly described in textbooks on syphilis and ophthalmology, instead of merely being mentioned.

A case is described in which a solitary gumma involved a lower eyelid. At first possibilities of furuncle, hordeolum and chalazion had to be excluded, and after later development, tuberculosis cutis, chancre and basal- or squamous-cell epithelioma.

316 MICHIGAN STREET.

NEW BOOKS

Clinical Pediatrics. Diseases of the Genito-Urinary System in Infancy and Childhood. By Henry F. Helmholz, M.D., Professor of Pediatrics, University of Minnesota (The Mayo Foundation); Head of the Section on Pediatrics, the Mayo Clinic, Rochester, Minnesota, and Samuel Ambert, M.D., Associate Professor of Pediatrics, University of Minnesota (The Mayo Foundation); Associate, Section on Pediatrics, the Mayo Clinic, Rochester, Minnesota, supervising editor, Royal Storrs Haynes, Ph.B., M.D., Clinical Professor of Diseases of Children, College of Physicians and Surgeons, (Columbia University), New York City. Vol. XIX. D. Appleton and Company, New York and London, publishers.

Ohio's Class A Medical Schools, Their Importance In and Relation to Medical Education and Adequate Number of Physicians in Proportion to Population

Opening of another school year finds Ohio's three Class A medical schools—Western Reserve University, School of Medicine; University of Cincinnati, College of Medicine; and Ohio State University, College of Medicine,—exceptionally well prepared to continue the leading and prominent roles they have been taking in the field of medical education.

Information, data and statistics compiled by the executives of the three medical schools as they embark on another year of work reveal that Ohio has retained its place among the states acknowledged to be leaders in medical education.

An analysis of the extensive programs mapped out by the schools for the coming months and of some of the hoped-for achievements indicates once more that the well-established principle that the best is none too good when it comes to establishing a system for the education and training of future physicians is predominate in the minds of those administering the affairs of 'the Ohio institutions.

Every effort has been put forth, as in the past, to make the teaching force of each school of a high caliber. Careful selection of faculty members places the combined teaching force of the three Ohio schools in a high position in the country.

A steady growth in the physical plants of the Ohio institutions has been noted, offering to their students the benefits and facilities found in the most modern of medical training centers.

Special attention has been given to the important matter of enrollment. High entrance requirements have been established but these have in no way been designed to injure the chances of the qualified and ambitious student. Everything possible has been done to maintain a uniform enrollment in keeping with the facilities of each institution.

Statistics gathered at the opening of the 1930-31 school year show that applications for admission to all three schools far exceeded the number of students that can be accommodated. This fact indicates that there is no shortage of available material for future physicians and that the three Ohio schools rank high in the estimation of premedical students.

Following are brief summaries of information and statistics on each of the three Ohio schools as the present school year got underway, as well as a short review of medical education throughout the United States in general:

WESTERN RESERVE, SCHOOL OF MEDICINE

Western Reserve University, School of Medicine, opened its 88th year with a student body of 256, the largest enrollment in the history of the school.

The registration in the various classes is as follows: First year, 75 regular, 1 special; second year, 61; third year, 61, and fourth year, 58. The freshman class is limited to 75 students each year.

This balanced enrollment indicates that administrators of the school have been careful in the selection of students and have developed a uniformity that should produce efficiency and thoroughness in classroom and laboratory work.

Further evidence of this uniformity in the number of students and in the number of students who go on to graduation are shown in the following tables of figures for the past five years supplied *The Journal* by the registrar of the School of Medicine:

NUMBER OF STUDENTS

	1930	1929	1928	1927	1926
Freshman	75	72	71	73	73
Sophomore	61	58	60	61	53
Junior	61	59	60	52	59
Senior	58	57	52	58	36

GRADUATES

1930	1929	1928	1927	1926
54	52	58	36	47

Analysis of the foregoing statistics shows a surprisingly small mortality among the student body of the medical school, testifying to the splendid judgment used by those charged with the task of selecting students qualified to enter the school.

The steady progress that has been recorded by the Cleveland institution during the past few years and the high place it occupies in the opinion of premedical students are evidenced by the large increase in the number of applications for entrance received during the past five years, not including the number received for the present school term. Applications received in 1925 totaled 239; those in 1927, 250; 1927, 383; 1928, 503, and 1929, 623.

The School of Medicine at Western Reserve University has long been regarded as one of the leaders in the march of progress that medical education has made during the past few decades. It has always been among the first to add to its program methods that were proved to be beneficial to the advancement of scientific medicine and assets to more efficient instruction of the potential physician. However, the school has tempered its progressive attitude and policy with a

rare degree of conservatism, and has been successful in avoiding the dangers of super readjustments and wholesale shake-ups in its training procedures.

The policy of the school in this respect is well summarized by Dr. Torald L. Sollmann, dean of the School of Medicine, in a recent report to the president of the University, in which Dr. Sollmann said:

"Progress is conditioned to a large degree on the striving for excellence, and this is conditioned to a large degree on cost. Each institution must strike its own balance between excellence and cost, according to its resources and support; but, on the whole, the more generous the balance, the more generous will be the results. Expense is wasteful only if it is unwise; if it is spent on hasty projects and on vacillating policies; and especially if the policies are subjected to alternating support and neglect which leaves the ground strewn with the abandoned wrecks of unfinished and therefore useless projects; with elaborate excavations, crumbling without superstructure, and with flimsy constructions on inadequate foundations. However, while discontinuity of policies is bound to entail losses, it is necessary to preserve adaptation to changing conditions, and to avoid rules and attitudes that bind and hinder and confine. Excessive rigidity in planning may be worse than vacillation. Crystallization of projects and policies may yield rapid results, but if the crystallization is premature, the results may go wrong. In securing effective integration, many factors must be weighed and balanced; many problems must be tried experimentally, often in several directions, before they can be decided, and the maturation of time often is necessary before the results can be judged. This course of development, by trial, adaptation and deliberation tends toward the progressive accumulation of undecided problems in various stages of progress, especially when the time available for a thorough study of fundamental policies is limited by the pressure of the daily routine of current administration. The final disposition of the broader problems must therefore bide its season, until the data are matured and the circumstances are propitious. This requires patience, tempered by the understanding that indecision beyond a certain point becomes unprofitable and eventually detrimental."

Expansion of the University hospital center has presented an additional problem for the School of Medicine, especially the Department of Medicine under the professorship of Dr. Joseph T. Wearn.

The task that the Department of Medicine has faced is in brief that of building up a competent staff sufficiently large to handle the increased hospital duties entailed by the expansion of the hospital center and drafting a schedule that will permit extensive personal attention to the patients; extension personal teaching of the students, and yet leave time for research work by members of the staff.

Few alterations in the curriculum as a whole have been made, due to the school's policy of caution and deliberation in the matter of junking tried-and-true methods for those that have not been given the test of experience.

The attitude of the Cleveland institution on this problem of medical education is clearly expressed by Dr. Sollmann in the report referred to above.

"In short, it should be realized that the medical curriculum does present difficult and complicated problems, which can scarcely be resolved by any simple formula; for a formula adjusted to remove one set of difficulties, is likely to raise or accentuate others," declared Dr. Sollmann in summarizing his views on the question. "The fundamental difficulty lies in the magnitude and the exactions of the task. In a limited time, which it is neither feasible or desirable to extend materially, the medical student must be trained in fundamental principles, and at the same time must learn the multitude of details which are vitally necessary to the interests of his patients and which therefore can not safely be neglected. The scope of the acquisitions which are not merely theoretically desirable, but which he can use and will indeed need in his daily work, is such that every moment of the medical course must be fully used to approach as close as may be to the goal. This demands careful selection of subjects by the teacher; it also requires a careful fitting together of the subjects. A rigid curriculum gives the best opportunity for the most economical and most efficient utilization of time, although this need not mean that every moment must be crammed by set exercises. Rigidity has obvious disadvantages, especially the danger of substituting mechanical uniformity for individual initiative. Flexibility would be desirable, but it cannot be extended in any large degree without either lengthening the course to an undesirable extent, or else diminishing the requirements; and this may involve risks to the future patients. The two tendencies must be properly balanced and different schools will and should strike a balance at a different level, and in a different manner. The irksomeness of the problem tempts too drastic solutions, because they would at one stroke remove the particular difficulties that have been acute, while the new difficulties which will arise have not yet been experienced and are therefore less visualized. Gradual, patient, continuous adjustments of individual problems, individual cases and individual students are less spectacular, but may yield results of greater and more permanent value, provided that the importance of the problem is realized and not neglected."

Western Reserve School of Medicine is said to have one of the most competent and efficient faculties found at American medical training centers. The present faculty consists of 35 professors and 171 lecturers, assistants, etc.; a total of 206. New members of the faculty for the present school term are: Dr. James A. Doull, professor of hygiene and public health; Major Ross B. Bretz, professor of military science and tactics; Dr. Donald E. Gregg, instructor in physiology; Dr. Henry A. Blair, instructor in biophysics, and Dr. Irwin Hanger, demonstrator in medicine.

Dr. Doull, former associate professor of epidemiology at the School of Hygiene and Public Health, Johns Hopkins University, takes an important position in the faculty, one left vacant through the resignation and retirement of Dr. Roger G. Perkins, who had headed that department since its reorganization in 1908. Although

the Department of Hygiene and Public Health under Dr. Doull will continue to carry on work in the subject of bacteriology, plans are well underway for the establishment of an independent Department of Bacteriology and Immunology due to the important place of these subjects in modern medicine.

During the past year, the school lost through death two of its outstanding faculty members and men of international reputation in their fields, Dr. Carl A. Hamann, former dean and professor of anatomy since 1893, and Dr. George N. Stewart, professor of physiology since 1894 and director of the Cushing Laboratory of Experimental Medicine.

The faculty also lost one of its oldest emeritus members through the death of Dr. George Coates Ashmun.

Major Samuel F. Parker, professor of military science and tactics, was transferred during the past year and succeeded by Major Bretz, and Dr. George B. Ray, associate professor of physiology, was granted a leave of absence for study in England.

Development of the University medical center will continue during the coming year. The new Lakeside Hospital, the general hospital and outpatient hospital of the University Group are rapidly nearing completion and may be ready for dedication early in 1931. A new nurses' dormitory is about ready for occupancy and two other buildings, one a five-story service building and the other a four-story animal house, are under construction.

Western Reserve, School of Medicine, was organized in 1843 as the Cleveland Medical College. It assumed the present title in 1881 and in 1910 it absorbed the Cleveland College of Physicians and Surgeons. It was made co-educational in 1919. The curriculum embraces three years of eight and one-half months each and one year of 11 months. Three years of college work are required for admission with the additional requirement that the student must secure the baccalaureate degree on completion of one or two years of work in the medical school. The total fees for each of the four years are, respectively, $380, $365, $355 and $365.

UNIVERSITY OF CINCINNATI, COLLEGE OF MEDICINE

Enlargement of its physical plant and increases in its faculty have placed the University of Cincinnati, College of Medicine, in a position to take an even more prominent role in medical education during the present school year than it has taken the past.

Information received from Dr. Arthur C. Bachmeyer, dean of the College of Medicine, shows that the college has registered a steady growth during the past five or six years, both in student enrollments and in the quality of service and training offered by the school.

Figures compiled by Dr. Bachmeyer reveal that each succeeding year finds an increasing number of applicants for admission, the present term having established an all-time record. The Admission Committee, which held sessions during the spring semester of 1929-30, considered between 700 and 800 applications. It has been the policy of this committee to accept students conditionally quite early in the spring, subject of course to satisfactory completion of the courses being taken at that time. Under this system, the freshman class is practically completed shortly after the end of the college year in June.

The freshman class of 1930-31 numbers 90, the same as last year. The College has found it effective to accept only a limited number of students whereby complete facility becomes available for their instruction in each department.

The total enrollment for the current term is 289, divided by classes as follows: Freshman, 90; sophomores, 73; juniors, 65, and seniors, 61.

The comparison of the number of students enrolled in the several classes during the past five years and of the number of graduates during that period is evidenced by the following statistics:

NUMBER OF STUDENTS

	1929-30	1928-29	1927-28	1926-27	1925-26
Freshman	91	78	73	72	70
Sophomores	73	64	66	64	65
Juniors	61	61	66	65	68
Seniors	58	67	69	67	55

GRADUATES

	1930	1929	1928	1927	1926
Doctor of Medicine	64	66	64	56	64
Bachelor of Medicine	57	65	65	64	...

It will be noted that beginning with the Class of 1927 the degree of Bachelor of Medicine was awarded at the expiration of the student's collegiate work. The degree of Doctor of Medicine is awarded only upon completion of one more year of work which consists of an internship in a hospital duly approved by the College of Medicine faculty.

During the past year, the chief addition to the physical plant of the College of Medicine was the Kettering Laboratory for Industrial Physiology, erected at a cost of more than $100,000. The building is expected to be ready for occupancy not later than November 1. The laboratory will be operated under the direction of Dr. Martin H. Fischer, professor of physiology. Dr. Robert A. Kehoe, assistant professor of physiology, will be in direct supervision.

A considerable number of changes have been made in the faculty of the College which numbers 274 persons, 90 of whom are professors and 184 assistants, associates, etc.

Dr. William B. Wherry, professor of bacteriology, has returned to his duties at the College after spending a year in research work in tropical

medicine at the Graduate School of Sanitation and Public Health, University of the Philippines, Manila. Dr. Wherry's leave of absence was granted last year by the Board of Directors of the University at the request of the Rockefeller Foundation.

Dr. A. Graeme Mitchell, professor of pediatrics, has taken up his duties after a six-months leave of absence abroad, where he visited hospitals, clinics and research institutions in order to obtain new ideas in connection with the completion of the new research building in the Department of Pediatrics, adjoining the new Children's Hospital.

Promotions received by faculty members for the current school term include:

Dr. Julien E. Benjamin, director of the outpatient dispensary to fill the vacancy caused by the death of Dr. B. K. Rachford.

Dr. Henry W. Bettman, rank of professor of medicine.

Dr. Stanley E. Dorst, rank of associate professor of medicine.

Dr. Frank E. Coppock, rank of associate professor of gynecology.

Dr. Joseph Freiberg, rank of assistant professor of orthopedic surgery.

Dr. J. Victor Greenebaum, rank of associate professor of pediatrics.

Dr. Robert A. Lyon, rank of assistant professor of pediatrics.

Dr. Clarence A. Mills, named James F. Heady professor of experimental medicine.

Dr. Leon Schiff, rank of assistant professor of internal medicine.

Dr. John H. Skavlem, rank of assistant professor of medicine.

Dr. Russell Speckman, rank of assistant professor of medicine.

Dr. A. R. Vonderahe, rank of assistant professor of anatomy.

Dr. Hiram B. Weiss, rank of associate professor of medicine.

Dr. Harold Reineke, rank of assistant professor of radiology.

Among numerous additions to the staff was that of Dr. Lee Foshay as lecturer in physiology. Dr. Foshay, formerly associated with the College but for several years assistant professor of medicine at the University of Iowa, School of Medicine, has returned to Cincinnati to take charge of the new research division of Christ Hospital.

The University of Cincinnati, College of Medicine, was organized in 1909 by the union of the Medical College of Ohio, founded in 1819, with the Miami Medical College, founded in 1852. The Medical College of Ohio became the medical department of the University of Cincinnati in 1896. Under a similar agreement, March 2, 1909, the Miami Medical College also merged into the University, when the title of Ohio-Miami Medical College of the University of Cincinnati was taken. The present title was assumed in 1915. It has been coeducational since organization. Two years of college work are required for admission and the course covers four years of eight months each with an additional requirement of one year's internship in an approved hospital. The total fees for the four years are, respectively, $360, 360, $300 and $320, and if not a legal citizen of Cincinnati, $50 additional.

OHIO STATE UNIVERSITY, COLLEGE OF MEDICINE

One of the most difficult problems faced each year by the administrative executives of the College of Medicine at Ohio State University is that involving the selection of freshman from the hundreds of applicants for admission to the college.

It has been the policy of the college for several years to limit its freshman class to 100 students. This policy was adhered to for the 1930-31 session. The difficulty of the task of choosing this comparatively limited number of students is made obvious by the fact that approximately 1200 sought admission to the medical college this year.

Seven hundred of those seeking admittance were from outside the State of Ohio and were refused, due to the custom of giving residents of Ohio the preference providing they are able to meet the entrance requirements and until such times as the college is able to accommodate a larger enrollment. About 300 of the 700 students turned away actually filed all papers for consideration while the remainder were discouraged or advised regarding admission or rejection before filing complete applications.

"It is to be regretted that with the increasing number of Ohio students seeking admission, the freshman class cannot be enlarged," declared Dr. J. H. J. Upham, dean of the College of Medicine, in commenting on the enrollment figures. "However, this is impossible with the present physical plant and the existing number of teachers. Only the completion of Hamilton Hall, additional clinical facilities and appropriations for more teachers will permit the accepting of a larger number of students."

The comparative uniformity in the various classes obtained over a period of years through careful handling of the enrollment problem is shown by the following statistics, giving the number enrolled during the past five years:

NUMBER OF STUDENTS

	1930	1929	1928	1927	1926
Freshman	100	100	100	100	100
Sophomore	80	70	92	70	78
Junior	70	80	60	73	88
Senior	79	60	76	85	70

The percentage of students who have successfully passed all the work offered by the college and have gone on to graduation is revealed in the following table of graduates for the past five years:

1930	1929	1928	1927	1926
58	74	82	58	77

The big demand for admission to the Columbus

institution has been an added incentive for medical college officials and members of the entrance board to devote considerable and serious study to the enrollment question. Methods in vogue in other universities have been analyzed and studied, resulting in a method of selection which takes into account not only the grades in premedical instruction but also the character and personality of the applicants, geographical distribution and the recognition of other colleges of the state. The results of this method seem to be already apparent in the showing of the students admitted and the lowering of the percentage of failures.

The faculty at the medical college at Ohio State University has endeavored to assume a practical attitude toward medical education and at the same time visualize and apply, when possible, some of the more intangible factors involved in the practice of medicine.

Something of the spirit that permeates the teaching force may be glimpsed through analysis of part of the address delivered to the members of the 1930 graduating class of the college by Dr. Upham, entitled, "The Successful Physician".

"There is a science of medicine and an art of medicine," Dr. Upham told the out-going class. "Assuming them to be quite separate and distinct theoretically, in the successful practice of medicine they are indissolubly joined.

"Science through the dissecting room, the laboratory and by animal experimentation has laid the foundation and erected thereon the entire structure of modern medicine. It has done a marvelous work. It has enlisted the labors of the physicist, the biologist, the botanist and the chemist in the solution of the many problems. It has discovered the causes of many diseases and the methods of preventing their invasions as well as in combatting their activities; it has shown us how to prevent and check epidemics so that many deadly scourges of the past have practically disappeared; it has outlined the definite courses of many diseases so as to enable us to know what to expect and what to guard against. While there are many problems still unsolved, we look with confidence to the future for their solution.

"Its one great failure, that which keeps modern medicine from being an exact science, is in the inability to gage that mysterious quality of inherent individual bodily resistance to disease, that factor of the personal equation, an undiscoverable unknown quantity which prevents the reducing of disease and its results in the human body to plain mathematical formulas.

"The art of medicine also has its limitations and without science is altogether like faith without works—dead. It is something that may be stressed in the college course but cannot be actually taught; it has no recognizable place in the curriculum, yet its importance is widely conceded. It is acquired only through observation, contact with the sick, experience and thoughtful contemplation. It seeks to make the practice of medicine individualistic rather than along the popular modern ideas of mass production. It considers patients as personalities rather than as 'cases'. It endeavors to fit the remedy to the individual rather than the individual to the remedy. It takes into acocunt the varying personal reactions, personal temperments, familial influences and environments and in general humanizes the practice of medicine. In the medical college the science of medicine is necessarily stressed as the foundation for all medical practice; the type of superstructure to be erected thereon is the life task of each individual and each must be his own builder. * * *

"A brief survey of the careers of the graduates of this institution in the past twenty years warrants the statement that every one who will apply himself or herself to practice with average industry, adhere to the principles taught and observe the moral and legal obligations of the community is practically guaranteed a comfortable living for the future. * * * I do not believe that the successful physician differs greatly, if at all, from successful men in the other activities of life, or that it requires a particular medical aptitude to achieve success. * * * The possession of the general aptitudes and characteristics that make for success in any business or profession and with a fair degree of special qualities previously mentioned will make equally for success in medical practice. This I say not to discourage any who may have thought of themselves as naturally inclined as physicians, but rather to comfort the majority who have failed to feel any special election or 'call' to medical practice, and to assure every one that possibilities of success, yes, outstanding success, are open, dependent only on individual effort, energy, industry, intelligence and steadfastness of character."

With the opening of the fall school year, a new Department of Medical and Surgical Research began to function at Ohio State University. The primary aim of this new department, it is pointed out, will be to further the present scientific knowledge of disease in the various fields in which each staff member is most interested and best equipped by experience to study, and to foster the spirit of medical investigation among the medical students. Selected cases will be admitted to the University Hospital for special observation and treatment, and certain clinical studies will be carried out in conjunction with other medical groups in Columbus. Fundamental researches of a physiological and pathological nature are to be carried on in the laboratory of the new department. Whatever facilities the department may have are to be at the disposal of all members of the medical faculty in the pursuit of their own investigations, and it is hoped that in time a service may be available to the members of the medical profession not included in the faculty.

Dr. Charles A. Doan, graduate of the School of Medicine, Johns Hopkins University, and a former member of the research and teaching staffs of Johns Hopkins and Harvard Medical schools, and most recently with the Rockefeller Institute for Medical Research, New York City, is the director of the new department. Dr. Bruce K. Wiseman, graduate of the University of Indiana, College of Medicine, and formerly with the Rockefeller Institute, is assistant director. Dr. Samuel T. Mercer, of the Class of '29, Ohio State University, College of Medicine, is an assistant in the department and resident on the new service.

Ohio State University's College of Medicine was organized in 1907 as the Starling-Ohio Medical College by the union of Starling Medical Col-

lege, organized in 1847, with the Ohio Medical University, organized in 1890. In 1914 it became an integral part of the Ohio State University with its present title and has been coeducational since organization. The faculty consists of 51 professors and assistant professors, 71 lecturers, instructors, demonstrators, etc., a total of 122. Two years of college work are required for admission and the course covers four years of 34 weeks each. Tuition fees are $196, $186, $186 and $191 each year, respectively, for residents of Ohio, and $105 more for non-residents.

MEDICAL EDUCATION IN NATION

Material evidence that medical education in the United States has made astounding progress during the past few decades and is destined to make still further extensive advancement is found in the thirtieth annual report of the Council on Medical Education and Hospitals of the American Medical Association, recently completed, which summarizes data for the school year, ending June 30, 1930.

Some of the features of this report will be reviewed briefly in subsequent paragraphs in order to show the solid foundation of modern medical education in the United States and the high standards that have been attained through the constant and sincere efforts of organized medicine and leaders in the field of education.

There are at the present time in the nation, 75 recognized medical schools—those given a Class A rating by the Council on Medical Education and Hospitals. Although the Medical School, University of Southern California, has not as yet been given an acceptable rating, an acceptable status has been given students of this school who had finished the two years of work during the sessions 1928-29 and 1929-30. It is probable that when the organization of the California medical school has been completed, it will be given an approved rating, increasing the list of Class A schools to 76.

The report points out that in the light of scientific investigation, sectarianism in medicine has practically disappeared, there beng but two schools bearing homeopathic titles in the Class A list, and that these schools teach pharmacology and therapeutics in similar manner as other acceptable schools.

Although the number of medical colleges in the United States has gradually declined since 1906 when there were 162 such institutions in existence, a steady increase in the number of students enrolled has been noted in recent years. In 1906, the peak year in the number of medical schools, there were 25,204 students enrolled in the 162 schools. During the year ending June 30, 1930, 21,597 students were enrolled in 76 schools, an increase of 719 over the year ending June 30, 1929. Since 1919 there has been an average increase in enrollment of 433 students each year.

The total enrollment for the year 1929-30 was divided into classes as follows: First year, 6,457; second year, 5,496; third year, 4,931, and fourth year, 4,713.

The number of graduates for the year ending June 30, 1930, was 4,565, or 119 more than in 1929. Although the total number of graduates decreased from 5,747 in 1904 to 2,529 in 1922, the number of graduates coming from Class A medical schools has increased from 267 in 1906 to 2,929 in 1921, and since all medical schools are now in Class A, a comparison of the years 1922 and 1930 shows an increase in graduates of 2036.

Analysis of the figures on enrollments and graduates, together with statistics showing that the United States has 1,266 physicians for each 100,000 of the population, thereby having a far more generous supply than any other country, is undoubtedly the basis for the following significant statement in the report:

"With the constantly increasing numbers of students and graduates there is no need of any alarm regarding the supply of physicians in the United States the next quarter century."

An interesting sidelight on the results that have been attained through the suspension of medical colleges of the lower standards is the experience of the Ohio State Medical Board at the time of the mid-summer examinations for licenses to practice medicine and surgery in Ohio. Those taking the medical and surgical examinations numbered 197, two of whom were graduates of foreign medical schools. Everyone of the other 195 applicants for licenses were graduates of Class A, American medical schools, it being the first time in the history of the Board that all applicants from American colleges had been graduates of Class A institutions.

A total of 6,457 students were admitted to the first year classes of the Class A medical schools at the session of 1929-30. Of this number 5,916, or 91.6 per cent obtained their premedical training in liberal arts colleges or junior colleges which have been investigated and approved by standardizing agencies considered as acceptable by the Council on Medical Education and Hospitals.

This overwhelming number of students who secured their pre-medical training in approved colleges illustrates the unusual progress that has been made in standardizing and elevating the standards of premedical education throughout the United States and indicates that schools offering premedical training of an inferior type will have to improve their courses or cease to be stepping stones for Class A medical schools.

Of the 4,565 medical graduates in 1930, 3,211 or 260 more than in 1929, had also obtained degrees in arts and sciences, and 70 per cent of the graduates held collegiate degrees compared with 15.3 per cent of the graduates in 1910. All of the medical schools are now requiring two or more years of college work for admission, which brings

more students within reach of the combined courses for the B.S. and M.D. degrees.

Commenting on this phase of medical education, the report declared:

"It must not be inferred from these statements that a baccalaureate degree should in any sense be made a requirement for the obtaining of either a medical degree or the right to practice medicine. With the requirement of two or more years of premedical study, medical education in the United States is now on a par with the requirements in other countries. There is no objection to any medical school which so desires to require entrance qualifications in excess of two years and students who have the time and means also are urged to continue their college education and obtain the degree. It is believed, however, that provision should always be made for students otherwise exceptionally qualified who would be put to much inconvenience to obtain the two extra years of college work. From the first, the Council on Medical Education and Hospitals has believed that for medical licensure the maximum premedical requirement legally should not exceed two years of college education."

At the present time, three medical schools require graduation from a college of arts and sciences as a minimum for entrance, fifteen require three years of college work for admission, and four require three years of college work for admission, with the additional requirement that the student must secure the baccalaureate degree on completion of one year of work in the medical school.

Relative to the financial phases of medical education, the report shows that tuition fees in medical schools have been gradually increasing, the average fee per student in all medical schools in 1930 being $307.

It is pointed out that more emphasis is being placed on internship following graduation, there being 11 medical schools now which require that students shall have completed a fifth year as an intern in an approved hospital before they are eligible to receive the M.D. degree. It also is pointed out that approximately 90 per cent of all students obtain the internship whether required to do so or not, showing how valuable the intern year is in the opinion of recent graduates.

While the A.M.A. Council's report does not cover data relative to applications for and refusal of admittance to medical schools, this interesting angle to the question of medical education is adequately covered in a report compiled by Dr. Burton D. Myers, dean of the School of Medicine, University of Indiana, for the Association of American Medical Colleges.

Dr. Myers' summary is based on reports from 83 medical schools of the United States and Canada and shows that for the school year 1929-30 these schools received applications aggregating 31,749 filed by applicants aggregating 13,655 of whom 7,035 were successful in having their applications accepted. During the past four years, the period during which such a report has been compiled, there has been a steady increase in the number of students applying for matriculation in medical schools, the average increase each year over the preceding year being 1,183. In 1929-30, the number of applications averaged 2.32 per student.

Commenting on this phase of his report, Dr. Myers declared: It seems evident, therefore, that the medical schools of the United States and Canada can accommodate all well prepared applicants. Their failure to do so is due not to lack of capacity but to errors of judgment in the selection of certain numbers of the freshman class. It may be presumed that the careful studies being made on the best methods for the selection of freshman medical students will not only result in the exclusion of a still higher percentage of those who fail but in the inclusion of some of that relatively small group of students, if such exists, who may fail to secure matriculation in any medical school of the United States or Canada."

Observations on the Problems, Duties and Training of Interns Made by Hospital Executive

There is probably no phase of medical education more important to the career of the man or woman about to take his or her place in the ranks of the medical profession than the period of internship that follows years of academic training.

Scores of young physicians are at the present time serving their internships in Ohio hospitals, seeking an education on some of the practical questions of medical practice. How well they succeed in making good interns may have an important effect on their success in private practice. What they get out of this probationary period depends upon their initiative, personality, judgment and ability, and upon the efficiency of the machinery that has been set-up by hospitals to give them the practical clinical training that they are seeking.

An interesting discussion on interns, intern training and the responsibility of the hospital staff and superintendent in this phase of medical education was presented before the New York State Hospital Association by Dr. Louis J. Frank, executive director of the Beth Israel Hospital, New York City.

Some of Dr. Frank's observations on this important question were in part as follows:

"We expect from an intern strict adherence to the rules of the institution, a respectful attitude

towards the nursing personnel, a conscientious application to his task and a humane regard for his patient.

"An intern has a great deal left to his discretion. He can go through an entire period of hospital training without breaking any rule and yet, at the same time, be wasting his effort. Much depends upon his personality and judgment. In order to profit completely, he must be alert. He must have initiative and imagination.

"It is in the hospital that interns first begin to learn of the responsibilities of the physician for his private patient, and it is only by their intelligent and sympathetic attitude towards patients that they can begin to learn the technique of the bedside manner and the sympathetic attitude accepted by the private patients.

"It is important that interns learn how to deal with anxious relatives of patients and that they exercise the consummate tact and delicacy necessary to win their confidence.

"In short, the superintendent expects the intern to have dignity and a sense of professional decorum. He expects willingness to cooperate in the performance of duties, which, while by no means uniformly pleasant, are necessary. The superintendent expects the intern to show deep interest in the progress of the patients under his care and to make use of the experience he is obtaining without in any way discommoding the patient or the hospital. He expects him to understand the mechanism of the hospital and how he fits into the general scheme of things as well as to maintain the intelligent attitude of a younger man who will one day be expected to take charge and assume responsibility. The intern should be willing to adjust himself to the requirements of a particular situation, to perform a piece of work when an emergency arises without childish concern as to whether or not it is a sufficiently dignified task for a member of the house staff."

Analyzing the responsibility of the hospital staff and the superintendent in the education and handling of interns, Dr. Frank said:

"A great deal is expected of the older members of the medical staff and their conduct is supposed to have and often has a great influence upon impressionable young interns. Medical men themselves, however, are far too harassed to be able to devote much of their time to the training of their interns in the finer points of medical practice. It devolves, therefore, upon the superintendent to keep a watchful eye upon these neophytes in medical practice, and occasionally to call the attention of the older doctors to their own laxity towards the interns and of their responsibility to act as father confessor, mediator, disciplinarian and counselor.

"It is a truism by now that the hospital owes interns an education in return for the services they render. Therefore, it is necessary to have as members of the attending staff men with talent and ability as teachers, men endowed with a generous interest in the progress of the younger physicians, men whose work is of such a caliber as to inspire and fortify the hopeful young intern. This is an even more vital factor in the hospital than the excellent equipment that every institution should have.

"During the impressionable days of his internship, the young man gains an idea of the vicissitudes to be encountered in general practice. He becomes familiar with the commercial side of medicine for the first time. It devolves upon the superintendent to protect the young intern from exposure to the temptations of the tawdry practitioner, to see that he comes in contact with the type of physician who does not allow himself to be tainted by the commercial side of medicine, who conducts himself in a dignified ethical manner, earning his living honorably and maintaining deep interest in medical progress.

"It is also the duty of the superintendent to take an active part in seeing that educational opportunities are made available for the young intern, to interview members of the attending staff in behalf of the interns, to arrange lectures and to create fellowships and scholarships. It is important to see that the intern is imbued with a sense of responsibility and that while he works under supervision, his work does not become merely a menial carrying out of orders. Even a junior intern should be entrusted with the care of the patient. He should be allowed to submit a line of treatment in a specific case to an older man who can with sympathy and understanding supervise and make suggestions.

"There is too much tendency to waste the intern's time. While the intern must take care of histories and make physical examinations, certain clerical work, such as charting, which is of no profit to him, should be done by the paid clerical and laboratory staff of the hospital. The intern should of course be asked to do laboratory work, but he should not be asked to perform clerical or routine laboratory work."

Today's interns are the physicians of the future. Unless they are guided right they are as likely as not to prove a liability, instead of an asset, to the medical profession and the public at large.

NEW BOOKS

Clinical Pediatrics. Laboratory Pediatrics. By John D. Lyttle, A.B., M.D., Assistant Clinical Professor of Diseases of Children, College of Physicians and Surgeons, Columbia University, New York; Assistant Attending Physician, Babies' Hospital, Medical Center, New York City. Supervising Editor, Royal Storrs Haynes, Ph.B., M.D., Professor of Diseases of Children, College of Physicians and Surgeons (Columbia University) New York City. Vol. IX. Illustrated. D. Appleton and Company, New York and London, publishers.

Importance of Psychiatry and Expert Testimony in the Determination of Criminal Responsibility

Despite the severe criticism frequently made of the use of psychiatrists in the courts and the confusion that has arisen over the employment of medical expert witnesses, psychiatry is now making, and through further study will continue to make, a practical contribution to the administration of criminal law, in the belief of Dr. Winfred Overholser, assistant commissioner of mental diseases of Massachusetts.

Dr. Overholser, in an address before the Section on Criminal Law and Criminology of the American Bar Association at the association's 1930 meeting in Chicago, reviewed some of the progress that had been made in the application of psychiatry to the penal system and predicted future developments would bring law and medicine more closely together in the effort to solve the nation's crime problem.

Referring to the oft-heard statement that "the psychiatrist, as an expert witness, is in disrepute," Dr. Overholser said:

"Whether the fault is that of the expert or not, the fact remains," he said, "that in the minds of the public, of the jury, and unfortunately of the courts as well, there has arisen a widespread impression that the testimony of experts is to be taken with great caution. As a matter of fact, in many cases it has been disregarded entirely by the jury on account of the apparent conflict. This has been especially true of psychiatric expert testimony for several reasons. It has been used at times in cases where the facts as to the offense were clear, so that insanity constituted the only possible defense. These were crimes often of an unusually shocking or hideous type which attracted much public attention and desire for revenge. Thus undue attention has been focused on these cases, and there has been no inclination on the part of the public to sympathize with any attempt to explain or mitigate the motives of the crime. As a matter of fact, the number of cases in which the defense of insanity has been adduced has been comparatively small, yet in the minds of the public there seems to remain a very firmly fixed idea that they are numerous and that the services of experts are prostituted in the majority of them."

Outlining some of the remedies that have been sought and tried for the apparent unsatisfactory status of expert testimony, Dr. Overholser declared that the appointment of experts by the court, and the examination of all persons indicted for a capital offense by a state commission of scientists come closer to solving the problem than any of the other methods proposed and tried.

He made special reference to the so-called "Briggs Law" in Massachusetts as a "practical illustration of the manner in which psychiatry can aid in the administration of criminal law". Dr. Overholser explained that under the Briggs Law any person indicted for a capital offense and any person bound over to the Superior Court or indicted for any offense who has previously been convicted of a felony or been indicted more than once shall be reported to the State Department of Mental Diseases for a mental examination by two psychiatrists appointed by the Department. The report of the two examiners, he said, is forwarded to the clerk of the court in which the trial is to take place and is accessible to the court, the district attorney, counsel for the defendant and to the probation officer of the court.

Dr. Overholser quoted some interesting figures on the operation of the Massachusetts law. Of the 844 defendants examined under the statute up to October 15, 1929, 40 have been reported as definitely insane and 82 as mental defectives. In 39 other cases observation commitment was recommended for purposes of determining definitely whether or not the prisoner was suffering from mental disease. A diagnosis of psychopathic personality was made in 16 cases; epilepsy in one case, and of dull or borderline intelligence in nine cases.

In commenting on these statistics, Dr. Overholser said:

"Some points of interest stand out particularly in these figures. First of all is the fact that only about one-fifth of all the prisoners examined were reported as abnormal. To be sure these examiners have been conservative and these figures present the lower limit. Yet they are certainly far from the being in harmony with the doctrine to the effect that crime is a result of mental deficiency. Another point of interest is that the number of frankly insane is relatively small, being only about 3 per cent of those examined, whereas 9 7/10 per cent of those examined have been found to be mentally defective, that is, feeble-minded. Even though this is a considerable proportion, it is considerably under the figures of twenty or more per cent sometimes cited as representing the proportion of feeble-minded in the criminal group."

Dr. Overholser described what he termed "the various types of abnormality found among offenders." He stated that "in all they constitute a very considerable proportion of the number of offenders coming before the bar. It would seem reasonable to suggest that some of these groups at least might be identified in the court and disposed of in some other manner than by sentence to a penal institution. Some of them, for example, are hospital cases, while others would classify properly in an institution for defective delin-

quents, where they could be segregated until such time as they are fit to be released."

In concluding his address Dr. Overholser said:

"To sum up, we may say that psychiatry takes the position that the offender is an individual with his own peculiar makeup and history, that his reactions, therefore, to given situations are individual; that in a measurable proportion of cases these reactions may be termed, from a psychiatric point of view, abnormal; that the line between 'normal' and 'abnormal' cannot be sharply drawn, that in some instances the existence of these abnormalities may call for what is generally termed lenient treatment, but that on the other hand these abnormalities may indicate the existence of dangerous tendencies, antisocial and undesirable, calling for special treatment and for segregation; that segregation, whether for the frankly normal or not, should be made a matter of individual study and that release should be dependent upon reasonable proof that the individual is a safe person to be at large; that a proper disposition of criminal cases depends upon scientific knowledge of the offender and his history; that this aid can best be rendered by a psychopathic clinic attached to the court, or at least a psychiatric service which is available to the court under public auspices; that the so-called 'tests of insanity' are antiquated and out of line with modern and generally accepted psychiatric teaching and that they are unfair in many instances to the defendants; that a provision should be made for the permanent segregation of criminals who by reason of their mental constitution represent menaces to society; that persons acquitted by reason of insanity should not be allowed to go at large but should be detained in a proper institution until recovery. It is the belief of present-day psychiatry that these principles will conduce to a greater degree of true justice to the defendant and, perhaps, even more important, to a greater degree of protection of society."

Qualifications of the Ideal Nurse as Summarized in Report on Committee on Nursing Schools

The ideal nurse for the present-day physician is one who has good breeding and an attractive personality, skill in giving general care and making patients comfortable, who can observe and report symptoms well, takes care to follow medical orders and is adept at handling people.

This picture of the perfect nurse was ascertained from questionnaires sent to doctors in many branches of medicine, by the Committee on the Grading of Nursing Schools, which is conducting a five-year study of nursing and its problems. The above qualifications were the five most stressed by the more than 4,000 physicians from all parts of the country who answered the queries.

Just how the various requirements for a good nurse rank in the minds of the physicians as a whole, may be seen from the following:

65% want the nurse to have skill in general care
65% want the nurse to have skill in making the patient comfortable
45% want the nurse to have skill in observing and reporting symptoms
43% want the nurse to have care in following medical orders
34% want the nurse to have good breeding and attractive personality
30% want the nurse to have skill in handling people
28% want the nurse to have skill in asepsis
27% want the nurse to have familiarity with hospital routine
22% want the nurse to have experience and background
21% want the nurse to have familiarity with their personal methods
15% want the nurse to have ability to work under a heavy strain
15% want the nurse to have familiarity with a particular disease
3% want the nurse to be a responsible adult to take charge of the family
3% want the nurse to be a mother's helper and houseworker.

The modern physician thus places the old-fashioned concept of a nurse as "a pair of hands and feet" at the bottom of the list. His demand now is for a woman of good background, of high professional principles, with thorough training and experience in the actual care of the patient, as nurse for his cases.

The study shows that the demand for practical nurses by physicians is steadily dropping, with 84 per cent preferring the graduate, registered, trained nurse at all times for their own cases, and an additional 8 per cent preferring them always for certain types of cases.

The general practitioner and the internist are most interested in the ability of the nurse to give general care, 69 and 70 per cent, respectively, registering for this quality, as compared with the average percentage of 65. The neurologist is least interested in it, though more than half of those questioned checked for it.

Skill in observing symptoms is most desired from the nurse by the surgeon, neurologist, obstetrician and pediatrician. The three last-named groups also had a more than average interest in the qualification of good breeding and personality. The surgeon emphasized skill in asepsis and care in following medical orders as well.

The neurologists are by far the most interested in having for their patients nurses who can handle people, 61 per cent checking this, as compared with an average of 30 per cent.

Nurses who take particular care to follow orders shine brightest in the eyes of the pediatricians, 57 per cent of them desiring this qualification, while the average demand is 43 per cent. The surgeons and the obstetricians are most interested in having nurses familiar with hospital routine and their personal methods.

Nine out of ten physicians reported they are getting the nurses they want and would be glad to take the nurse on their last case back again. The surgeons were the group most satisfied, 63 per cent of them marking their nurses with the highest rating, according to the committee report.

The Largest Medical Library in the World Owned and Operated by Uncle Sam

Who is the owner of the largest medical library in America?

Many individual physicians are the proud possessors of extensive collections of medical literature and scores of institutions have large libraries of medical works, but the credit for possessing the largest medical library in America goes to Uncle Sam whose Army Medical Library is also rated as one of the finest in the world.

An interesting description of the Army Medical Library was made recently by Colonel P. M. Ashburn, its chief librarian, in an article published in the United States Daily, which read in part as follows:

"The Army Medical Library, known throughout most of the civilized world by its former name of "The Library of the Surgeon General's Office, U. S. Army," is the largest medical library in America and one of, if not the largest and most useful in the world.

"It also achieves an output of work which is believed to be unparalleled for the amount of personnel involved and money expended. The one great publication for which the library is wholly responsible is its Index Catalogue, the eighth volume of the third series of which has just come off the press. In the 46 columes of the Index Catalogue thus far published is indexed by author and subject the greater and better part of the known medical literature from ancient times to January 1, 1926. No other medical bibliography of comparable completeness and extent has ever been published.

"In addition to the Index Catalogue, the library for many years, under a grant from the Carnegie Institution, prepared and published the Index Medicus, a monthly index of the current medical literature. In 1927 this was combined with the Quarterly Cumulative Index of the Journal of the American Medical Association, to form the Quarterly Cumulative Index Medicus. The library prepares and edits the index cards relating to about 800 medical journals, for the use of this publication.

"The number of periodicals devoted to medicine and allied subjects now received, and examined at the library is about 1,800, the number of separate copies per year about 18,000. The number from which articles are indexed is somewhat less. The Index Catalogue and Quarterly Cumulative Index Medicus are available for consultation in all large and many small cities of the United States and in many foreign cities. Investigators in this country and Canada who desire to borrow material, books or articles cited therein may do so by making application through a local library for an interlibrary loan.

"The borrower pays the cost of transportation both ways and the loans are made for periods of two weeks, which period may be extended for good reasons. Unbound periodicals, such reference books as dictionaries and encyclopedias, and such old and rare books as could not be readily replaced if lost or injured in transit are not loaned outside of the library. Loans are made directly to officers of medical services of the Army, Navy, Public Health Service and Veterans' Bureau.

"The Army Medical Library at the close of the fiscal year of 1929 contained 324,541 bound volumes, 528,921 other printed items, including unbound volumes, pamphlets, monographs and transactions, 8,707 photographs of physicians and scientists, 797 medical engravings and prints, 447 medical caricatures, and 518 volumes in its historical collection of books printed before 1500.

"From the copyright division of the Library of Congress there is received the second copy of all medical books received from copyright. Over a period of years an average of 350 books have been received from this source and 343 volumes came to the library in this manner in 1929.

"Gifts of books from authors also furnish a source of additions to the library, but the bulk of the books are purchased through the medical book trade. In 1929 the number of books purchased was 735, of which 177 were American and 558 foreign, at an expenditure of $8,091.45.

"In the same years the Army Medical Library subscribed to 1,797 periodicals through medical agencies, of which 507 were American publications and 1,290 foreign. An effort is made to obtain every medical periodical in the world which is of any value in order that the special monographs and the contents of the periodical literature may be covered by the library indexers. As soon as a volume of a periodical is complete it is prepared for binding, and when bound is sent to the bound volume stacks. In this way the number of bound volumes is increased approximately 1,500 a year.

"Photographs are collected from periodicals or are donated to the library, while medical engravings, prints, and caricatures are purchased through the medical trade, although often they are donated. Current periodicals, after being indexed, are sent to the reading room, where they are kept on shelves available to readers until the volume is complete and ready for binding.

"In its function as a division of the Surgeon General's Office the Army Medical Library furnishes that office with the necessary periodical literature. It also furnishes the office with whatever medical books are needed and maintains a

small collection of standard reference works adjacent to the Surgeon General's Office. It furnishes upon loan whatever special books or periodicals are needed for the courses at the various schools of the Army Medical Center and the Medical Field Service School at Carlisle.

"The personnel of the library proper consists of 26, in charge of a librarian who also is a colonel of the Medical Corps of the Army and an assistant who is a lieutenant colonel. Librarians, translators, and clerks make up the rest of the library staff and 18 others constitute the force caring for the building in which the library and the Army Medical Museum are housed.

"It is considered that a fair estimate of the value of the library collection now approaching 1,000,000 items is $5,000,000. A large proportion of the material is absolutely irreplaceable, and another large part would be replaceable only at heavy expense. The cost of the maintenance of the library for the fiscal year of 1929 was $116,480."

U. S. Public Health Service Analyzes "Jake" Paralysis

During the past six months, scores of investigations have been conducted in an effort to determine the cause of a peculiar form of paralysis that recently afflicted a relatively large proportion of the population throughout some of the midwestern and southwestern states and was believed to have resulted from the use of jamaica ginger for beverage purposes.

One of the most recent findings on the "jake" paralysis epidemic is that made by the U. S. Public Health Service and summarized in a recent bulletin issued by that bureau.

What the investigators of the Public Health Service found out about the mysterious paralysis is analyzed as follows in the bulletin:

"A peculiar form of paralysis, perhaps unlike anything ever known before, has recently afflicted a relatively large proportion of the population throughout some of the Midwestern and Southwestern States. Definite figures on the extent of the disease are not available, but it is certain that the numbers run into the thousands. At the request of the State Health authorities of several States, the United States Public Health Service undertook studies of this condition. The investigations made in some of the stricken areas in Ohio and Tennessee seem to confirm the widespread rumor that the disease is closely associated with the drinking of an adulterated fluid extract of ginger. That it could not be due to the ginger as such became clearly evident from the fact that many of the victims when questioned admitted freely of having used similar preparations for beverage purposes for from 1 to 5 years with no other effects than those derived from the alcohol. It soon became evident, therefore, that the condition must have resulted from some unknown poison or from some known poison whose action was so altered through the ginger or the alcohol as to render it unrecognizable; which poison in some way got into a manufactured lot of so-called fluid extract of ginger at a relatively recent date.

"The possibility of some known or only partially known poison with its properties so altered as to produce a condition in man heretofore virtually unknown, must be considered. From the very nature of the problem it would seem not improbable that the suspected ginger contained some denaturant, since denatured alcohol might very well have been, and probably was, used in the manufacture of some of the ginger extract, or that it contained some adulterant, since it is known with certainty that adulterants of various kinds have been used for some years in the manufacture of this preparation. The studies conducted by the Public Health Service, though by no means complete, seem to indicate that the latter explanation appears to be the correct one, though the mechanism of the suspected adulterant is as yet not clear.

"The exact nature of the pharmacology of the compound which has been found uniformly present in suspected ginger and absent in unsuspected ginger is as yet unknown. From its chemical behavior it appears to resemble a phosphoric acid ester of Tricresol, which in itself does not appear to be a well-defined chemical entity. Its resistance to heat, the strong alkali and extreme heat required for its saponification, and the fact that phosphate has been found in the suspected gingers, would make it very probable that it may indeed be the ester suggested.

"Further studies of the subject are being continued by the Public Health Service."

A hospital may not be held liable for the negligence of a staff surgeon in performing an operation in cases in which the surgeon is employed privately, the Supreme Court of North Carolina held in a recently decided case. Being engaged by the patient, the court held, the surgeon, though a member of the staff and a stockholder of the hospital company, could not be the agent of the hospital.

NEWS NOTES

Columbus—Dr. and Mrs. J. A. McClure were feted recently on the occasion of their fiftieth wedding anniversary.

Cleveland—Dr. O. P. Kimball, Dr. E. P. McCullagh and Dr. D. P. McCullagh received honorable mention in the annual contest for the best essay dealing with goiter problems, held under the auspices of the American Association for the Study of Goiter. The $300 prize for the best essay was won by Dr. William F. Rienhoff, Jr., Baltimore, Maryland.

Annual State Welfare Report Emphasizes the Importance and Extent of Institutional Building Management ⁂ Increase in Wards of the State

An outline of the multiple activities of the State Department of Public Welfare; a review of the accomplishments of the Department during the fiscal year ending December 31, 1929; an analysis of some of the problems of the state in its public welfare and institutional program, and a summary of some of the projects that are to be launched in the near future to aid Ohio in this phase of public service are found in the annual report of State Welfare Director H. H. Griswold recently completed.

Interesting statistics on the population of the 21 welfare institutions under the management of the State Welfare Department, showing in a measure the increased responsibility of the state in the matter of institutionalizing the various wards of the state, are found in Mr. Griswold's summary.

On December 31, 1929, there were 15,046 inmates in the eight State Hospitals for the Insane, an increase of 296 over the census taken on December 31, 1928. The 1929 figures for the eight hospitals were: Athens State Hospital, 1,358; Cleveland State Hospital, 2,284; Columbus State Hospital, 2,405; Dayton State Hospital, 1,314; Lima State Hospital, 1,020; Longview State Hospital, 1,908;; Massillon State Hospital, 2,633, and Toledo State Hospital, 2,124.

In commenting on the foregoing figures, Director Griswold said:

"The table given above should not be accepted as a measure for the increase of insanity in the State of Ohio. On account of the overcrowded conditions of all the hospitals for the insane there has been a tendency on the part of the courts to refrain from committing cases that under other circumstances would have been sent to the hospitals. * * * A survey of the custodial capacity of the hospitals for the insane made earlier in the year disclosed that measured by the standard adopted by the Department of Public Welfare of New York, these hospitals are carrying 12 per cent more than their normal capacity. The increase in population would have been considerably larger during the year had there been facilities for taking care of such increase."

Discussing some of the methods of treatment being used in the various hospitals for the insane, Mr. Griswold emphasized the important work being done in occupational therapy and stated that the Department is making every effort to develop this to a higher degree of efficiency.

A census of the two State Institutions for Feeble-Minded, one at Columbus and the other at Orient, reveals that the Columbus institution on December 31, 1929, had a population of 2,013 and the Orient institution a population of 2,429, an aggregate increase during the year of 236.

Relative to the feeble-minded situation in the state, the report emphasizes the necessity of rapidly completing the new institution now being built at Apple Creek and of the future development of the site recently purchased for a fourth institution near Otterbein. It was pointed out that 14 per cent of the inmates now in the feeble-minded institutions do not have sufficient mentality to care for their own needs.

The Ohio Hospital for Epileptics at Gallipolis on December 31, 1929, had a population of 1,947, an increase of 20 during the year, the report shows.

Pointing out that the care of epileptics by the state is an acute problem, the report declared:

"The care of epileptic patients presents a problem that is peculiar in itself. In the Ohio Hospital for Epileptics we find not only epileptic, but the insane, feeble-minded and criminals; in fact, almost every conceivable type of physical and mental derangement with epilepsy superimposed upon it, is to be found in the institution. The original purpose of this hospital was to give care to those epileptics suffering from the milder and more curable forms of epilepsy. The limited facilities available, however, and the ever increasing demand for custodial care of epileptics that become dangerous to the community and to themselves has resulted in a large measure in the exclusion of that type of epileptics for whom the hospital could hope to do the greatest service. A survey of the hospital population some years ago revealed that in the hospital population more than 90 per cent of the patients were in some measure demented. Accepting as it does only the most acute and troublesome cases, the hospital is unable to do the constructive and preventive service which its founders had visualized as being its function."

That part of the report devoted to the penal and reformatory group of institutions of the state shows that the combined population of these four state institutions increased 488 during 1929. The census of the institutions on December 31, 1929, was: Ohio Penitentiary, 4,673, an increase of 491; London Prison Farm, 929, a decrease of 31; Ohio State Reformatory, 2,811, an increase of 41, and Ohio Reformatory for Women, 398, a decrease of 53. The total population of the four on that date was 8,811. The two schools in the correctional group of institutions registered an aggregate decrease of 22 during 1929, the number of inmates at the Boys' Industrial School at

the end of the year being 1,101, a decrease of 38 and the number at the Girls' Industrial School being 529, an increase of 16.

An extensive summary of the administrative activities of the Department and of the financial layout involved in carrying on these activities is given in Mr. Griswold's report.

The physical properties owned and operated by the Department, it is pointed out, are valued on the books at over $40,000,000 and "their actual value is probably far in excess of this amount". The expenditures of the Department for the year 1929 were $8,008,165.69; the payroll contained the names of 3526 persons; about 10,710 acres of land were cultivated as part of institutional farms and manufactured products in the Division of Manufacturing and Sales of the Prison Department amounted to $1,873,892.23. The total value of products produced on the farms was $1,518,823.70.

"The operations of the Welfare Department involve a larger expenditure of public funds than any department of the state government except the Highway Department and without any exception they involve the expenditure of funds in a greater variety of ways," the report declares.

One chapter in the report is devoted to accomplishments for the year 1929. Listed among these were:

Creation within the Department of a Division of Business Administration to handle financial matters and see that the business policies as determined by the Director of Welfare are executed.

Creation of a Council on Mental Hygiene within the Department , consisting of the superintendents of the state mental hygiene institutions, for the purpose of coordinating the work of the various institutions.

Creation of a Council on Penal and Reformatory Institutions, composed of the superintendents of the penal, reformatory and correctional institutions.

Start of work on the new Institution for Feeble-Minded at Apple Creek and development of the London Prison Farm and the Grafton State Farm.

Expansion of the schools in the penal and reformatory institutions.

Additions and betterments to state institutions of the Department under construction on December 31, 1929, costing $1,031,700.00.

Additions and betterments in preparatory stage and contemplated during 1930, costing $2,689,500.00.

Additions and betterments completed during year 1929, costing $1,343,950.00.

Organization within the Department of a Division of Probation and Parole to supervise the work of probation and parole within the state.

Consolidation of parole forces of the Ohio Penitentiary, London Prison Farm and the Ohio State Reformatory to eliminate duplication of effort and expense.

Creation of a position of Departmental Representative as a means of furnishing contact with the public in matters particularly involving women.

A number of specific studies made by the various divisions and sub-divisions of the Department were listed in the report, the most important of which were:

Study of the probable total capacity which will be needed during the next 10 years in the state mental hygiene hospitals and in the state penal, reformatory and correctional institutions.

Study of a plan fixing standards for transfers as a means of adjusting institution population.

Study of dietary problems.

Study of plans for the activities of the Department of Welfare in public education and establishment of local mental hygiene clinics.

Study of the question of the standardization of training courses for nurses and attendants in the state hospital service.

Study of the parole and probation system and a program for the classification of prisoners.

An understanding of some of the problems faced by the Department may best be had by reproducing some of the observations made by Mr. Griswold here and there in the report, as follows:

"Ohio has lagged far behind the more progressive eastern states in the use of probation, the rate of commitment per capita being nearly twice that in the state of Massachusetts where probation and parole work has been most highly developed. * * *"

"If we were to attempt to put our finger on the point at which Ohio has failed to bring its welfare work up to the standard of other states comparable to it in wealth and industrial progress, I believe we might fairly say that the difficulty lies in a failure to effectively give the people of the state an adequate idea of the extent and nature of its welfare program. * * *"

"Comparative statistics show that the costs of personal service in the institutions of Ohio as compared with the same item in institutions of other states that are comparable to this state are very much lower. A great difficulty has been experienced by the superintendents of the institutions in drawing into their service young physicians of the type to help carry out a progressive policy and to become available material for appointment to superintendencies in after years. * * *"

"The most serious situation which the Department has confronted during the year and which it will confront during the ensuing year is the problem of capacity of its institutions. * * *"

"No problem has attracted greater attention of the public nor received more serious consideration by the Department than the problem of employment for the men confined within its penal institutions. * * *"

In the conclusion of his report, Director Griswold analyzed a suggested 10-year state welfare program.

There are several considerations that should be kept clearly in mind in attempting to project such a program, he points out. These are:

The program must be bigger and broader than any one man or any group of men, and must be built on a foundation so sound that the continuance of any one man or any group of men in

office will not be the deciding factor between success and failure.

Such a program must emphasize the element of prevention as distinguished from the element of attempted cure, such as increased attention to the mental health of school pupils, more effective social follow-up of patients released as cured, segregation of feeble-minded during the reproductive period of life, betterment of the probation and parole system, better trained personnel, thorough and serious study of juvenile delinquency problems.

The program decided upon must have the confidence and support of the people of the state, to be gained by educating the public as to the work attempted and keeping the people informed as to how the funds for welfare purposes are being expended.

Such a program must be elastic and be viewed in a broad-minded, generous way by all interested parties and individuals.

In attempting to forecast an institutional building program for a period as long as 10 years, it is necessary to take into consideration a great many variable factors, Mr. Griswold said, such as a study of census figures, institutional data and experience of comparable states, check-up of social service follow-up work, analysis of efforts being made in the prevention of juvenile delinquency and crime, etc.

"Therefore, any building program that is projected for that period should be of such a nature that it can be curtailed at any point in the procedure without destroying the fundamental plans," Mr. Griswold declared. "When once a conclusion has been reached as to the extent of the custodial capacity that will be needed within this period, it will be economy for the state to build this fast enough and big enough so that the increased institutional capacity can have its part in a preventive program in addition to taking care of custodial needs."

Director Griswold's general suggestions for a building program for the various classes of state welfare institutions were:

Since it may be safely assumed that for five years at least, the rate of increase in the population of the state's institutions for the insane will be as great as it has been on the average for the past 10 years, a building program to meet a proportionate increase for the next 10 years should be projected, this program to be curtailed later if the contemplated increase for the first five years of the period does not materialize.

Preparations to house approximately 8000 feeble-minded at the end of the next 10 years must be made on the basis of the increase of the populations of the two institutions for feeble-minded during the past 10 years. The population of the two institutions at the end of 1929 was 4308.

Two new cottages should be erected at the State Hospital for Epileptics or provision made at some other state institution for the care of certain types of patients now housed in the Gallipolis hospital.

The state must plan for a greatly enlarged prison plan to take care of the needs that are sure to arise at the Ohio Penitentiary within the coming decennial period. The London Prison Farm should be expanded. Intelligent use of parole supervision and more widespread use of probation are recommended to reduce the number of prisoners at the Ohio Penitentiary. Effective application of a system of classification of prisoners also is suggested.

Expansion of the building program at the Boys' Industrial School at Lancaster should be contemplated and the Grafton State Farm should be used as a site for an institution for defective delinquents.

Expansion at the Ohio Reformatory probably will be necessary within the next 10 years which may necessitate the enlargement of the area enclosed by walls.

Other sections of the report are devoted to the activities of the State Bureau of Juvenile Research, The Madison Home for Widows of Civil War Veterans, the Ohio State Sanatorium at Mt. Vernon, the Ohio Soldiers' and Sailors' Home at Sandusky, the Division of Charities which does extensive work in the field of care for crippled children and maintains a guardianship for dependent children, and the Ohio Commission for the Blind.

The Value of Health Department Educational Publicity With Human Interest Appeal

Periodic reports released by county and city health departments are an interesting study in contrasts.

Some health administrators in Ohio have the happy knack of being able to translate dull and dry figures and data into valuable human-interest tales, thereby presenting to the public information that appeals to the reader and is at the same time authentic and accurate.

Others are seemingly void of any sense of imagination or originality. Time after time their releases to the press consist of columns of figures and scientific data that makes little or no impression on the newspaperman, to say nothing of the average newspaper reader.

The public has been tutored to expect a punch in its reading material. That which lacks it is quickly relegated to the wastebasket. Adding a kick to public information, however, does not necessarily mean that the basic content should not be accurate and reliable. Such an error would of course be a glaring mistake in public health publicity. On the other hand, the health official who has the initiative and is capable of injecting human interest into his publicity is the one who is making progress in the educational phase of public health work.

Dr. Henry F. Vaughn, of Detroit, sizing up the educational possibilities of health departments, writes in the American Journal of Public Health:

"Too many annual reports of purely statistical character are published by health departments. For the most part they are wasteful of paper. Very few individuals read the details. Its seems to be a tradition among health officers to publish a report which may contain a short introduction

by the administrator, but which consists largely of disjointed, poorly prepared and inadequately presented departmental reports. How much better to present a logically yet simply told story of the activities for the past year, giving only the high lights of statistical importance, such as the total death and birth rates and the death rates from the more important causes. The annual report may well be on account of the activities of each of the divisions and sub-divisions of the department, told in an informal and coherent fashion and not as a formal, choppy and jumbled statement from the director of this or that division. Preferably the same author should prepare the entire report, or at least one individual should serve as editor so that phraseology and method will be consistent."

A few public health officials are overlooking a splendid opportunity to make an intimate contact with the public by not putting more punch into their educational material. It should be understood, however, that punch and color are not synonomous.

More Routine Red-Tape is Proposed in Regulations Governing Withdrawal and Use of Medicinal Liquor

Considerable headway has been made within the past two months by officials of the U. S. Department of Justice and the U. S. Treasury Department in the matter of drafting new regulations governing the enforcement of the National Prohibition Law and the issuance of permits to those legally entitled to handle and dispense liquor in the course of their professional or business pursuits, and under the new administrative set-up, recent information emanating from Washington indicates.

Under the Prohibition Reorganization Act passed at the last regular session of Congress, the enforcement powers of the National Prohibition Law were transferred from the Treasury Department to the Department of Justice and authority to promulgate regulations and enforce rules governing the issuance of permits was given jointly to the Attorney General and the Secretary of the Treasury.

At the time of the reorganization of the prohibition machinery of the Federal Government, it was indicated that there would be a revision of the old regulations under which the enforcement and permissive branches had been operating. Up to the present time, few important changes in the regulation have been made. However, for the past three or four months prohibition officials have been studying the old regulations and reviewing suggestions for alterations.

The late information is to the effect that a draft of proposed regulations to be issued jointly by the Treasury and Justice Departments has been drawn up and will undoubtedly be used as a basis for discussion between the industries and professions affected and the government officials, with a view to reaching a decision as to the provisions that should be included permanently in the regulations.

It is understood that substantial changes have been made in the provisions of the proposed regulations that refer to the obtaining of medicinal liquor annually by physicians for use in office practice.

Under the old regulations, now in force, physicians were authorized to obtain six quarts of medicinal liquor each year, this being generally procured at one time, under one permit and one order form.

Following preliminary conferences, held previous to and at the time of the passage of the Prohibition Reorganization Act, prohibition officials stated that physicians would still be allowed six quarts of medicinal liquor a year under the new regulations. It was presumed at that time that physicians would be permitted to withdraw their quota of medicinal liquor at one time and with the filing of one application, the method authorized under the old regulations.

However, under the proposed new regulations, it is understood, physicians would be allowed to withdraw but one quart of medicinal liquor for office use every sixty days and that a new and complete application would have to be filed for each quart withdrawn.

This would mean the filing of six applications to obtain the allowance physicians may now obtain upon the filing of one application and the detail handling through administrative offices of six times as many sets of withdrawal papers.

The routine burden imposed by this proposed change in the regulations on physicians in getting their annual allowance of medicinal liquor is obvious, and the question is now being given serious consideration by prohibition officials and representatives of the industries and professions affected.

Under the routine involved in making withdrawals, the physician is required to first obtain the proper application form and then to complete it. In connection with the latter operation, he must select his vendor, as the name of such vendor must be included in the blank. The application must then be mailed to or filed with the prohibition office by the physician. When his permit is received, the physician must send his copy thereof to the vendor, and arrange for the receipt of the liquor upon its arrival. This routine takes no account of the necessity in some instances of following up the matter with the prohibition office where the application may have become mislaid or there is delay in acting on it.

Heretofore, physicians had to go through this complicated and exacting operation only once to receive their yearly supply of six quarts of medicinal liquor. Under the proposed plan of allowing physicians but one quart every sixty days,

they would have to go through the same operation six times a year.

It has been suggested that this new procedure has been proposed in order to give the government a better check on withdrawals of liquor from government warehouses and to aid enforcement of the prohibition laws.

Just how imposing an additional burden on the physicians of the country would tend to better enforcement methods or have any appreciable effect on the illegal use of liquor is somewhat a mystery to those who have made a study of prohibition questions and who have reviewed government statistics relative to the operation of the prohibition laws.

The fact that 49,000 physicians in the nation regard, by applying for it and purchasing it, medicinal liquor essential in connection with their practice, has been cited by some authorities as a proper and logical reason against the imposing of further severe or burdensome restrictions on physicians and others who use medicinal liquor in the practice of their profession.

As pointed out earlier, this important revision of the prohibition regulations has not been definitely decided upon, and it may be that after more extensive consideration of the question on the part of prohibition officials, the present system of annual withdrawals may be retained.

However, Ohio physicians who feel that the proposed change, limiting withdrawals by physicians to one quart every sixty days, would be unjustified as a prohibition enforcement measure and work an unwarranted hardship on physicians or their patients, may voice their protests to their Congressional representatives, Ohio's two United States Senators, and to Colonel Amos W. W. Woodcock, director of prohibition, Department of Justice, and Dr. James M. Doran, commissioner of industrial alcohol, Treasury Department, so that these officials may be fully advised as to the medicinal liquor needs of the country and have a thorough understanding of the problems faced by the individual physician as a result of prohibition restrictions now in force, or proposed.

Slow Collection of Delinquent Accounts Brings Renewed Activity by Various Types of Collecting Agencies

One of the effects of the recent and current business depression has been increased activity on the part of collection agencies and adjustment companies in drumming up business and using the increase in the number of slow accounts on the books of business firms and professional men as a sales argument for their particular service.

Unusual activity of various collection agencies among the physicians of Ohio is noted in information from scattered sections of the state. Numerous physicians have been approached by representatives of these agencies and asked to retain their respective company for the collection of overdue accounts. The fact that several agencies which have not heretofore operated in Ohio are now canvassing the state for business has complicated the question for physicians and members of other professions, as well as mercantile and industrial firms.

The Ohio State Medical Journal has from time to time carried warnings against various types of collecting agencies and similar schemes for which physicians are victims. Issues of *The Journal* in which items and articles referring to the question were published include: July, 1930, March, 1930, October, 1929, March, 1928, January, 1928, July, 1927 and June, 1925.

Investigation has shown that while there are apparently a number of collecting agencies that are reputable and that render efficient service, there are also a number of such concerns which have contracts of such a nature that the advantage is all with the company rather than with the client.

Every physician, before he signs a contract with any collecting or adjusting agency, should investigate the standing of the agency and take all the precautions possible in seeing that the agreement offered is not a trick to defraud him or give the agency legal permission to misuse the list of accounts submitted for collection. Special investigation should be made of agencies about which little or nothing is known and who have but recently started to do business in Ohio. If patronizing a collecting company it is desirable, if possible, to deal with an agent who is a local resident and whose reputation is well and favorably known.

A recent article carried in a bulletin issued by the Buffalo Better Business Bureau on collection agencies, which summarizes some of the tricks of the disreputable agencies and some of the complaints registered by victimized clients, should be of interest to Ohio physicians and should add emphasis to the warnings that have been published from time to time by *The Journal*. The article circulated by the Buffalo Better Business Bureau was in part as follows:

This bureau like the National Better Business Bureau and affiliated local Better Business Bureaus have been the recipients of considerable criticism and of numerous complaints concerning the business methods of a number of collection agencies. This censure has had its origin chiefly

in the failure of certain of these organizations to abide by the express or implied terms of the agreement with their clients and in the clients' misinterpretation of a not infrequently equivocal contract.

These concerns can be roughly classified as follows: (1) those which collect and remit a fair percentage to clients; (2) those which do not collect and (3) those which collect, but keep the entire amount amassed, remitting nothing to clients. There should be added to this classification the type which employs so stringent a contract that the creditor becoming a party to the agreement profits by less than nothing, ultimately owing the agency money beyond and in addition to the amount collected.

Not only are the terms of the contracts of certain of these agencies extremely stringent—but complaints directed to our attention would also indicate that certain of these organizations have:

1. Failed to remit collections made on accounts submitted.

2. Failed to report periodically on the progress of collection upon the client's written request.

3. Made it difficult for persons enlisting the services of such agencies to terminate the contract and regain control of their accounts.

4. Employed salesmen who verbally misrepresented the facts surrounding the contracts and concerning the agencies in question; (the said agencies repudiate such misrepresentations because extraneous to the technical terms of the contract).

5. Obtained the names of debtors and solicited them under false pretenses.

6. Endeavored to enforce payment of accounts which had long since been paid to the original creditors.

7. Operated, and are presently doing business, under imposing names apparently designed to beguile the credulous public; (some of these organizations have appropriated styles simulating the name adopted by a nationally known civic organization which functions in no wise as a collection agency).

8. Exploited contracts which are vague, ambiguous and inequitable.

The contract typical of the collection agencies which have come to our attention in a derogatory manner reads somewhat as follows, although the terms of the agreement are often considerably less explicit:

1. The contract is to run for a term of one year.

2. A docket fee of 50 cents is charged on each claim listed.

3. A minimum of 50 per cent of the first $1000 collected is charged; further, the agency is to receive a full 50 per cent of all instalment collections; outlawed accounts; those settled, withdrawn or ordered dropped by the client during process of adjustment, or collected through magistrates, attorneys or legal process.

4. A full 50 per cent commission must be remitted immediately to the company on all payments made directly to the client by the debtor.

5. Failure or refusal to furnish necessary evidence of indebtedness upon request will be considered instructions to drop.

6. Twenty-five per cent (this seems to be the customary rate) of all other collections accrue to the agency.

7. Claims not in process of adjustment will be released upon request in 12 months.

8. No agent of the company has authority to alter this contract either verbally or in writing and the agency is not responsible for or bound by any stipulation or representation not embodied herein.

It is readily apparent that a contract such as the above is drawn almost solely in the interests of the agency. The aggregate amount of the accounts submitted by many creditors does not total more than $100, so that the company is sure of 50 per cent commission on all monies collected.

It will also be remarked that it is in the interests of the agency to collect in installments (at least after the first $100 is amassed); by doing so it would profit by 50 per cent of the portion of the account collected, in lieu of 25 per cent were it to collect in full at one time. It would seem that the provision for a 50 per cent charge on all accounts withdrawn or ordered dropped might logically induce the company to create, rather than present, dissatisfaction or ill will on the part of its client, thereby causing him to withdraw his accounts. Relative to the clause regarding collections through magistrates, attorneys or legal process, the expression "legal process" is susceptible to misconstruction, for it seems the most that certain of these companies deem necessary to constitute "legal process" or action through attorneys is the mere mailing of a letter to the debtor by an attorney, who is often a regular employee of the agency.

While the agency stipulates that a full one-half commission must be paid *immediately* to the company on payments made directly to the creditor, there is often no corresponding clause which would require the agency to exercise like promptness. Not infrequently the agency will procrastinate indefinitely in making settlement for accounts collected.

The paragraph stating that "failure_____ to furnish necessary evidence of indebtedness___ _____will be considered instructions to drop" would appear to give the agency considerable latitude and the requirement imposes an evident hardship on the busy business or professional man submitting delinquent accounts.

The agency finally insures its title to a fat commission on any and all collections made by specifying that 25 per cent commission is charged on *all other collections.*

At this point it should be observed that, under the contract set forth above, there is no clause which would require the company to release to the client the balance of accounts not fully collected. It would consequently appear that the company could retain control of the accounts "in process of adjustment" indefinitely.

Finally, if the agent misrepresents the facts, making a verbal promise or prediction not covered by the contract, it would appear that the creditor has no recourse to the company for such extraneous oral representation.

The contracts of some of these liquidating groups are masterpieces of adroit phraseology—appearing on hasty inspection to be drawn equally in the interests of the agency and its client, but on closer examination to be composed almost wholly in the interests of the agency. Should the creditor not comprehend clearly the terms of the contract, he may very easily and innocently fail to comply with its rigid requirements and, as a

consequence, find himself liable to the company for most surprising sums.

The individual or company contemplating utilizing the services of a collection agency should first investigate the agency, ascertaining the names, previous affiliations and responsibility of its principals and making sure that it is the type which collects and remits promptly the client's quota. He should then examine the company's contract with understanding care, and, if possible (and it is certainly politic, especially when the meaning is not clear,) obtain competent legal advice before entering into the agreement. He should insist that the time clauses referred to above requiring specific performance on the part of the agency respecting both submittal of reports and the client's due quota of monies collected be included in or appended to the contract.



Edmund Cone Brush, M.D., Zanesville; Starling Medical College, 1875; aged 77; member of the Ohio State Medical Association; Fellow of the American Medical Association and Fellow of the American College of Surgeons; died August 19. Although in failing health for more than a year, he continued in practice until a few days before his death. Following his graduation, he was demonstrator of anatomy at Starling Medical College; assistant on the staff of Ohio penitentiary hospital and assistant on the staff of the Central Ohio Insane Asylum. From 1880 to 1884, he practiced in Perry County, and in May, 1884, located in Zanesville. For several years he served as chief physician for several of the city and county institutions and was prominent in public and civic affairs generally.

Dr. Brush was president of the Ohio State Medical Association in 1902; was a former president of the associations of the Baltimore and Ohio, and the Pennsylvania Railway Surgeons; and a member of the Association of Military Surgeons. As a participant in military affairs, Dr. Brush had won numerous honors. He enlisted in the Ohio National Guard in 1886, and was retired with the rank of brigadier general. He served as surgeon general of the Guard from 1900 to 1904; was chief of staff at Camp Bushnell during reorganization for war with Spain in 1898; and during the World War was a member of the Zanesville draft board and the medical section of the Council of National Defense. He is survived by three sons, Dr. E. R. Brush, Zanesville, with whom he was associated in practice; Charles, of Canton; Albert of New York, and two daughters, Mrs. Fred McGlasan, of Canton; and Mrs. Lawrence Hoskins of Youngstown.

George Cole, M.D., Tiffin; University of Wooster, Medical Department, Cleveland, 1879; aged 82; died August 20 at Mercy hospital, Tiffin. Dr. Cole practiced in Illinois, and later at Girard, Kansas. Following the death of his wife in 1913, he retired from active practice and returned to Ohio.

Oscar Edwin Bloom, M.D., Akron; University of Cincinnati, College of Medicine, 1910; aged 51; member of the Ohio State Medical Association and Fellow of the American Medical Association; died August 17. He had been a member of the Summit County Medical Society since 1925. He was commissioned a lieutenant, M. C. in 1918.

Patrick A. Gordon, M.D., Columbus; Medical College of Ohio, Cincinnati, 1880; aged 77; former member of the Ohio State Medical Association; died August 29 following a long illness of diabetes. Dr. Gordon had practiced for 50 years, and had been a resident of Columbus for 26 years. Surviving him are his widow; two sons and a daughter; two brothers and four sisters.

David Scott Hanson, M.D., Cleveland; University of Michigan, Medical School, Ann Arbor, 1876; aged 78; former member of the Ohio State Medical Association and Fellow of the American Medical Association; died August 10. He had practiced in Cleveland since 1877. He is survived by his widow, one son, and two daughters.

Clarence H. Kay, M.D., Springfield; Miami Medical College, Cincinnati, 1882; aged 74; member of the Ohio State Medical Association and the American Medical Association; died August 24. Dr. Kay, the son of the late Dr. Isaac Kay, spent his entire life in Springfield where he had practiced for 48 years. He served his internship at Cincinnati Hospital, and at one time was president of the Mitchell-Thomas Hospital in Springfield. In addition to his medical work, he maintained much interest in civic affars. His widow survives him.

Frederick D. Snyder, M.D., Ashtabula; Cincinnati College of Medicine and Surgery, 1896; aged 62; member of the Ohio State Medical Association and Fellow of the American Medical Association; died August 12 of heart disease. Dr. Snyder had practiced in Ashtabula for 32 years. Although the greater part of his time was devoted to his practice, he was well known as a naturalist, and was the author of many magazine articles on natural history, and for a number of years he had been compiling material for a book on the American Indian. He was elected a Fellow of the Royal Geographic Society of London, 20 years ago, in recognition of his work in the field of natural science. He is survived by his widow and two brothers.

Charles E. Stafford, M.D., Toledo; General Medical College, Chicago, 1886; aged 77; died August 1 after an extended illness. He had practiced in Toledo for 34 years. Surviving him are his widow, one son and one daughter.

Charles H. Stimson, M.D., Newark; Bellevue Hospital Medical College, New York, 1879; aged 80; member of the Ohio State Medical Association and Fellow of the American Medical Association; died September 13 of pernicious anemia. Dr. Stimson had practiced in Newark for 50 years, and during the World war, served as a volunteer surgeon. His widow and one sister survive him.

David R. Williams, M.D., Columbus; Starlng Medical College, Columbus, 1892; aged 67; member of the Ohio State Medical Association and the American Medical Association; died August 10 of pneumonia, following an illness since March, when he suffered a stroke of paralysis. Dr. Williams practiced for 14 years in Wellston before locating in Columbus. Surviving him are his widow and two sisters.

NEWS NOTES of OHIO

Cleveland—Dr. Frank P. Corrigan, director of surgery at St. Alexis' Hospital, was the official representative of the American College of Surgeons and the Gorgas Memorial Institute at the celebration of the centenary of the Republic of Ecuador held at the Ecuadorean legation at Washington.

Newark—Dr. George A. Gressle, formerly a member of the staff at St. John's Hospital, Cleveland, has taken over the office of the late Dr. J. P. H. Stedem here.

Cleveland—Dr. John E. Linden has retired from active practice for an indefinite period because of illness.

Lima—"Some Phases of Medicine of Importance to Laymen" was the subject of a talk given by Dr. F. G. Maurer before the local Rotary Club.

Cincinnati—The Eclectic Publishing Company has been organized to continue publication of the medical journal founded and published by the late Dr. John K. Scudder.

Piqua—A historical sketch of medicine and surgery was given the local Exchange Club by Dr. John F. Quirk.

Columbus—Dr. and Mrs. Robert B. Drury have returned from a vacation at their summer cottage at Gracefield, Que., Canada.

McConnellsville—Dr. Allen A. Tombaugh, formerly of McComb, has accepted the position of resident physician at the Rocky Glen Sanatorium.

Athens—Dr. Allan A. Cole, formerly of Lakeside Hospital, Cleveland, has become the associate of Dr. E. E. Campbell, succeeding Dr. George J. Heer who has moved to Columbus.

Jackson—Dr. J. L. Frazer, formerly of Cincinnati, has moved to Jackson to become the associate of Dr. W. G. Scurlock in the practice of medicine.

Troy—A partnership for the practice of medicine has been formed by Dr. Maurice I. Miller and Dr. Berton M. Hogle. Dr. Hogle was formerly in practice in Cincinnati.

Steubenville—Several score professional colleagues and friends of Dr. V. B. Di Loreto attended a dinner given Dr. Di Loreto on the anniversary of his completion of 25 years of practice in Steubenville.

Cambridge—Dr. Gordon Lawyer has returned from Philadelphia where he took a post-graduate course at the University of Pennsylvania medical school.

Vaughnsville—Dr. A. H. Nihizer, formerly of Columbus, has taken over the office and practice of the late Dr. E. P. Lemley.

Fredericksburg—Dr. Hugh J. Mitchell, formerly of Wooster and Cleveland, has joined his brother, Dr. William F. Mitchell, in the practice of medicine here.

Portsmouth—Dr. B. A. Finne, formerly of Chicago, has joined the staff of the Schirrman hospital here.

Circleville—Announcement has been made of the marriage of Mrs. Harriett Weldon, Columbus, formerly of Circleville, and Dr. Henry C. Allen, of Circleville.

Portsmouth—A plea for closer association and cooperation between the medical and legal professions was made by Common Pleas Judge W. P. Stephenson, West Union, in an address before a joint meeting of the Hempstead Academy of Medicine and the Scioto County Bar Association.

Cleveland—Dr. J. G. Jones has been made chief of the medical division of the accident department of the Cleveland Railway Company, succeeding Dr. George D. Upson, resigned.

Cleveland—Dr. R. A. Bolt, director of the Cleveland Child Health Association, is author of a health column being published in the *Cleveland Plain Dealer* under the auspices of the association.

Cleveland—Dr. Richard Russell of the Cleveland Babies' and Children's Hospital is spending a year of study in Germany.

Canton—Dr. Edward M. Feiman is taking post-graduate work in Vienna. He will be gone until about March 1, 1931.

Cleveland—Dr. Walter G. Stern will return about October 15 from Europe where he attended a meeting of the International Society of Orthopedic Surgery.

Springfield—Dr. J. A. Link is taking special work at the orthopedic clinics of Europe.

Marion—Dr. F. L. Hedges is recovering from injuries received when an ambulance in which he was taking a patient from Urbana to Columbus skidded and was wrecked.

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PROMPT AND FULL REPORT

Northwestern Ohio Meeting October 7

Annual meeting of the Northwestern Ohio Medical Society will be held October 7 at the Toledo Academy of Medicine Building, Monroe at Fifteenth, Toledo.

The morning program, starting at 9:30 o'clock and lasting until noon, will consist of three addresses. Dr. John Alexander, Department of Surgery, University of Michigan, will speak on "The Present Status of Thoracic Surgery". Dr. Ferris Smith, Grand Rapids, Michigan, will talk on "Asthma—Its Etiology and Cure", and Dr. Ralph Pemberton, professor of medicine, University of Pennsylvania, will discuss, "Arthritis".

Luncheon will be served at noon and at 1:30 p. m. the afternoon session will be opened. The following program will be presented: "Abdominal Caeserean Section", Dr. Irving W. Potter, Buffalo, N. Y.; "Functional Neuroses Which the Internist Sees", Dr. Charles P. Emerson, professor of medicine, University of Indiana; "Urinary Lithiasia", Dr. William C. Quinby, Peter Bent Brigham Hospital, Boston; "Carcinoma of the Stomach", Dr. Frederick A. Coller, professor of surgery, University of Michigan; "Recent Developments in the Management of Lesions of the Stomach and Duodenum", Dr. Donald C. Balfour, Mayo Clinic, Rochester, Minn.

In the evening there will be a banquet to be followed by an address by Dr. C. W. Waggoner, Toledo, president of the Ohio State Medical Association, on "The Importance of the Practice of Medicine to a Community", and another prominent speaker yet to be selected by the program committee.

News Notes From County Societies and Academies

First District

Adams County Medical Society held its August meeting at Hotel Norfolk, Mineral Springs, Ohio, on Wednesday, August 20, with eleven of its thirteen members present. Six visiting physicians besides several members of physicians' families, in all, 27, were the guests of the president, Dr. Vaughn, at the noon hour. Those from a distance were: Dr. J. T. Gibson and wife and C. C. Cropper and wife of Lynchburg; Drs. R. E. Holmes and H. H. Lowe, of Leesburg, and Dr. F. C. Beeks, of Portsmouth. Papers were read by Dr. Beeks and by Dr. A. R. Carrigan, of Manchester. An enjoyable and profitable day was spent. The Manchester members invited the Society to hold its October meeting at Manchester, and the invitation was unanimously accepted.—O. T. Sproull.

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Five County Medical Society, comprised of Clinton, Greene, Highland, Fayette and Warren counties, met at Wilmington, Wednesday, August 20. Following a luncheon, Dr. Walter Simpson, of Dayton, addressed the society.—News Clipping.

Warren County Medical Society held its regular meeting at Harmon Hall, Lebanon, on Tuesday afternoon, September 2. The program included a paper on "Spinal Meningitis", by Dr. John E. Witham, of Waynesville, which was followed by a discussion by members present, and a talk by Miss Isabel Blair, on "Leonardo da Vinci, 15th Century Artist, Philosopher and Anatomist". —News Clipping.

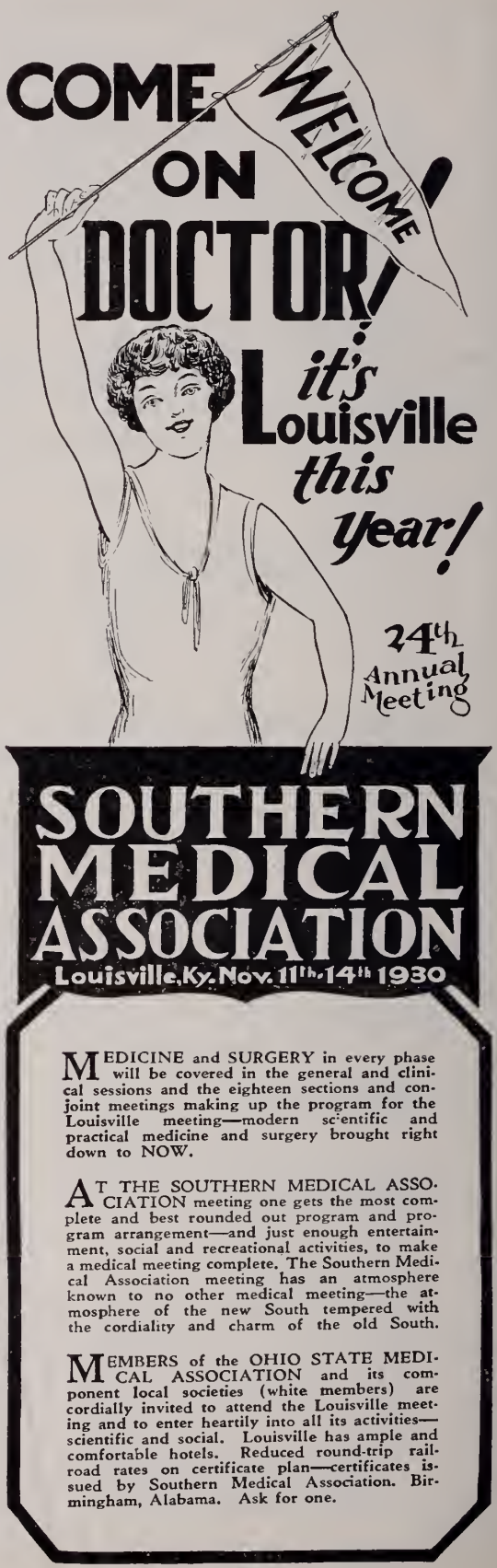
Second District

Greene County Medical Society met Thursday, September 4, and heard a paper read by Dr. Ben R. McClellan, which was written by Dr. Samuel Martin, a pioneer Greene County practitioner, in 1865. The subject was "Rupture of the Uterus", and besides reporting one case with recovery, the essayist displayed the use of sound judgment and real skill in its management. This document from the past started a lively discussion as to the old-time practitioners and the subject in hand. Under case reports, it developed that several cases of poliomyelitis have occurred here in the last month.—Reyburn McClellan, secretary pro tem.

The August meeting of the Greene County Medical Society was held at the Court House, Xenia, on Thursday morning, August 7, with 25 members present. An interesting paper on "Shortness of Breath", was read by Dr. Reyburn McClellan. Following the meeting, those in attendance enjoyed a luncheon at the Iron Lantern. —News Clipping.

Miami County Medical Society met at Stouder Memorial Hospital, Troy, on Friday afternoon, September 5. "Diagnosis and Treatment of Pernicious Anaemia", was the subject of a paper presented by Dr. John T. Quirk, of Piqua.—News Clipping.

Shelby County Medical Society held its regular monthly meeting at Memorial Hospital, Sidney, on Friday, September 5, with 21 members and 12 guests in attendance. Guests included F. D. Christian, of the Board of Trustees, and Laurence Lachey, representative of Sharp and Dohme. "Infant Mortality", was the subject of a talk by Dr. B. S. Stephenson, who presented a graph for the past five years, showing rate of mortality and premature labors. Discussion was led by Dr. Gudenkauf, and further discussed by Drs. Lindsay and Vernon LeMaster. The rules regulating the conduct of the hospital, presented by Mrs. Woolsten, were unanimously adopted. A motion prevailed that the physicians of the county be the staff of the hospital. Dr. M. F. Hussey was elected president, and Dr. A. W. Hobby, secretary. After an inspection of the hospital, mem-



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bers and guests enjoyed a buffet luncheon.—B. S. Stephenson, Secretary.

Fifth District

Lorain County Medical Society held its September meeting at Midway Inn, near Amherst, on Tuesday evening, September 9. Members and their wives enjoyed a five o'clock dinner, and the interesting program which followed. Dr. C. O. Jaster gave a report on the primary campaign and on public and legislative questions. Dr. Gertrude Moulton, Oberlin, gave a few impressions of a recent trip abroad, and Dr. W. B. Hubbell, spoke on "A Word More on Periodic Health Examinations", and also mentioned briefly, his recent trip to Rochester, Minn.—Bulletin.

Sixth District

Portage County Medical Society held its annual outing at Mantua on Wednesday, August 13. The afternoon was spent in out-door sports. At six o'clock about 50 members and friends sat down to dinner, which was followed by a humorous travel talk by Mr. Donald Gensemer, of Kent, and by motion pictures of a Western trip by Dr. S. U. Sivon, of Ravenna. The regular September meeting was held on the evening of the 4th, at the office of Dr. W. B. Andrews, in Kent. The program consisted of scientific motion pictures. —Emily J. Widdecombe, Secretary.

Stark County Medical Society held its annual outing at Canton on Wednesday, August 27. The morning was devoted to a clinic held in the auditorium building under the direction of Dr. Harry E. Mock, of the University of Chicago. Luncheon was served at the Brookside Country club, and the afternoon was devoted to golf and cards. A banquet was held at 7 P. M. at the club, with Dr. Mock as speaker.—News Clipping.

The regular meeting of the Stark County Medical Society was held on Tuesday, September 9 in the Medical Library rooms, Canton. The program consisted of a paper on "The Treatment of Cryptorchidism", by Dr. H. P. Hart, with discussion by Dr. Fred Stires and L. A. Buchman. —Program.

Summit County Medical Society held its first meeting of the Fall at the Akron City club on Tuesday evening, September 2. L. L. Kinsey, of the M. O'Neil Company, president of the Akron Credit Bureau, Inc., was the speaker.—News Clipping.

Seventh District

Columbiana County Medical Society held its annual picnic at Lake Placentia Park, on Thursday afternoon, August 14, with a picnic supper at six o'clock, attended by members, their families and friends.—Bulletin.

Eighth District

Perry County Medical Society met at the Park Hotel, New Lexington, on Monday, September 15 for a noon luncheon. Dr. Robert Drury, of Columbus, addressed the Society on the subject of "Prostatectomy".—Bulletin.

Muskingum County Academy of Medicine held its September meeting on September 10th, at the Hotel Rogge, in conjunction with the Muskingum Valley Dental Association with a total of sixty-seven present. Dr. Hugh McMillan, M.D., D.D.S., of Cincinnati, gave an illustrated lecture on "Oral Surgery, Its Relationship to Physician and Dentist", which was very enthusiastically received. The Academy decided to have all meetings dinner meetings for the balance of the current year. —Beatrice T. Hagen, Secretary.

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Ninth District

Scioto County—The annual outing of the Hempstead Academy of Medicine was held at the Portsmouth Country Club, on Thursday, August 21. Members, with their families and friends enjoyed an afternoon at golf, the annual chicken dinner at 6:30, and the special entertainment and music which followed.—Bulletin.

Tenth District

Knox County Medical Society held its annual picnic at the Mt. Vernon Country Club, Thursday, August 28. The meeting was attended by a large number of doctors, accompanied by their wives. The speakers of the day were Dr. Frank Harrah, of Columbus, who gave a most interesting address, illustrated by lantern slides, on "Hematuria". Dr. Engles of the Cleveland Clinic, gave an interesting talk, illustrated by *X*-ray plates, on "The Method of Giving Uro-Selectan". Following the program, a picnic dinner was served to the guests.—J. Shamansky, Secretary.

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PUBLIC HEALTH NOTES

—The forthcoming Ohio General Assembly will probably be asked to revise the Hughes-Griswold Health Law to permit cities to contract with county health departments for public health services. Under the present law this is not a legal procedure. The present situation in Cuyahoga County is cited as an example for such a revision. The following summary of the conditions in that county was published in a recent issue of the *Ohio Health News*, as follows:

'Taking cognizance of the fact that the 1930 Federal census will add materially to the number of cities in Ohio, and especially to the number of cities in Cuyahoga county, the advisory council of the Cuyahoga general health district, by resolution adopted at its annual meeting, suggested an amendment to the Hughes-Griswold Health Law designed to enable cities that cannot afford adequate health administration to provide such service by contract with the county board of health. The resolution, embodying the proposed changes, suggests that,

1. The second paragraph of Sec. 1261-20 shall not prevent a city health district (from) making a contract with the general health district in the county in which it is situated. The mayor of the said city, on authority of the city council, may negotiate a contract with the district board of health of said county for such health and sanitary services as are needed by the city. This contract shall run for one year and may be annulled on sixty days' notice from either party.

"Any city having a contract with the district board of health will be entitled to one member of the district board of health.

"2. Any city health district which makes a con-

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Here is an ideal recipe for the Diabetic Diet.

FRUIT JELLY
(Six Servings)

	Grams	Prot.	Fat	Carb.	Cal.
1 tablespoon Knox Sparkling Gelatine	7	6	....	....	....
¼ cup cold water	....	....	....	....	....
1½ cups boiling water	....	....	....	....	....
¼ cup lemon juice or 1½ teaspoons citric acid	40	....	....	4	....
Grated rind of one lemon	....	....	....	....	....
1½ grains saccharin	....	....	....	....	....
6 sections orange	75	1	....	9	....
6 sections grapefruit	90	.5	....	9	....
Total		7.5	....	22	118
One serving		1	....	4	20

Soak gelatine in cold water five minutes. Boil water and rind for two minutes. Add to gelatine and stir until dissolved. Add lemon flavoring and saccharin, strain and chill. Cut each section of fruit into three pieces. When jelly is nearly set, stir in cut fruit, mold, chill until firm and serve plain, with thin cream or whipped cream.

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A great many physicians are prescribing Knox Sparkling Gelatine for cases in which diet is an important factor as a preventive or corrective. Some physicians, however, merely prescribe "Gelatine."

There is such a great difference in gelatines that it is very necessary to designate the kind of gelatine.

For example, our attention has just been called to a case for which a physician prescribed "gelatine" in the diet of a diabetic. When indications of acid developed it was learned that the patient had unwittingly been using a ready-flavored jelly powder containing about 85% sugar, 2% acid-flavoring, 12% gelatine and coloring matter.

To guard against such errors, it is a wise precaution to stipulate Knox Gelatine and especially to call the patient's attention to the importance of the name "Knox."

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Always remember to add the name "Knox" to every diet prescription in which gelatine is a factor.

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Please send me, without obligation or expense, the booklets which I have marked. Also register my name for future reports on clinical gelatine tests as they are issued.

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tract with the district board of health for health and sanitary services shall be entitled to a subsidy from the State, equal to one-half the amount of money paid yearly to the district board of health. The amount of subsidy paid by the State shall not exceed $1000 for any six months period.

"Commenting on the resolutions, Dr. Robert Lockhart, health commissioner of the Cuyahoga district, says:

"If these two amendments were adopted by the legislature, it would be an excellent thing for the new cities of Cuyahoga county, as few of them will have enough money to support adequately a modern health department. If they are allowed to make contracts with the county board of health, they could get excellent health service, just as they have at present, and the cost probably would be no greater. It would seem that this is a fair arrangement.

Under the present law, a county board of health may combine with a city board of health, but the city then assumes control of the county health work. Is it not just as sensible to allow the opposite method, namely: for the city to make a contract with the county board of health, the county board then to have authority over the contracting city the same as over the county?

"Cuyahoga county already has three cities besides Cleveland—Lakewood, Cleveland Heights and East Cleveland. Census reports, although not yet finally checked, show that at least eight Cuyahoga villages have populations well above the 5000 each, and under the law they will have to qualify as cities Jan. 1, 1932. The proposed changes in health administration are designed to meet the health needs of these communities without adding to their financial burdens. If favorably acted on by the General Assembly they would, of course, apply to all cities in the State."

—County commissioners of Butler County have been asked by members of the Butler County medical profession and public health workers to submit a $300,000 bond issue to the voters this fall to provide funds for the erection of a county tuberculosis hospital.

—Civic groups of Marion, Logan, Hardin, Delaware, Union and Champaign counties are making a united campaign for a district tuberculosis hospital.

—A profitable harvest in the reduction of rural typhoid fever incidence has been reaped by Ohio since the State Department of Health launched a number of years ago on its rigid enforcement of roadside sanitation regulations. Progress that has been made is adequately sketched by the *Ohio Health News* in the following recent article on this phase of the state department's work:

"Profit inherent in public health work is nowhere more clearly apparent than in that phase of roadside sanitation involving the safety of water supplies used by the traveling public, con-

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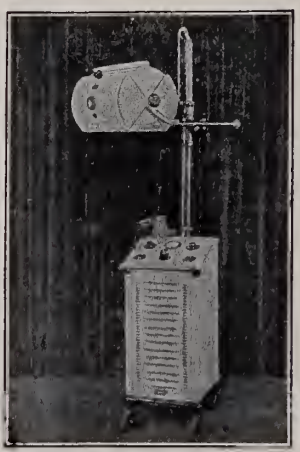
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As a starting point to carry out this entirely rational idea, the following formula is suggested:

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Skimmed Milk . . .	**9 fluidounces**
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This mixture furnishes 56.6 grams of carbohydrates in a form readily assimilated and thus quickly available for creating and sustaining heat and energy. The mixture supplies 15.5 grams of proteins for depleted tissues and new growth, together with 4.3 grams of mineral salts which are necessary in all metabolic processes. These food elements are to be increased in quantity and in amount of intake as rapidly as continued improvement is shown and ability to take additional nourishment is indicated.

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ducted by the state since 1923 under its 'Seal of Safety' campaign," that publication states.

"Ohio was the first state to take cognizance of the menace inherent in contaminated water supplies available to travelers on the highways, and having set it successfully under way, its example has been followed by virtually every state in the Union and all the Canadian provinces.

"It follows that, having first undertaken this important work, Ohio should be expected to furnish the first tangible evidence of its value as a factor in public health. For purposes of this study, the tier of county general health districts along the Old National Road—U. S. Highway 40—have been selected, because the National Road has the largest number of certified water supplies to be found along any Ohio highway, both in actual number and in proportion to its mileage.

"Typhoid fever is the chief water-borne disease, and since the general utilization of methods of water purification by municipalities, the larger proportion of typhoid develops in rural districts. With the more general utilization of the automobile for travel, the incidence of rural typhoid was intensified along the main arteries of traffic.

"For purposes of comparison, the following tables show the typhoid incidence in the selected health district for the six-year period preceding inauguration of the Seal of Safety campaign and the six-year period immediately following. The tables follow:

Preceding Seal of Safety Work

Gen. Health Dist.	1918	1919	1920	1921	1922	1923	6-yr. Totals
Belmont	39	27	28	51	27	20	192
Guernsey	10	40	12	51	28	15	156
Muskingum	14	7	5	29	19	17	91
Licking	22	19	16	29	14	8	108
Franklin	19	10	23	35	18	11	116
Madison	16	6	8	27	19	14	90
Clark	11	10	12	19	5	6	63
Montgomery	27	21	15	31	17	14	125
Preble	15	12	17	29	4	5	82
Totals	173	152	136	301	151	110	1023

After Inauguration of Seal of Safety Work

Gen. Health Dist.	1924	1925	1926	1927	1928	1929	6-yr. Totals
Belmont	11	37	40	23	13	11	135
Guernsey	14	22	11	8	3	5	63
Muskingum	6	9	5	7	3	2	32
Licking	5	7	4	6	5	4	31
Franklin	12	11	27	1	12	5	68
Madison	6	3	8	4	0	0	21
Clark	5	5	4	3	10	2	29
Montgomery	13	15	7	4	5	4	48
Preble	3	5	3	5	2	5	23
Totals	75	114	109	61	53	38	450

"By comparison with the first six-year period, the second, following the beginning of Seal of Safety work and coincident with its development, shows a reduction of more than 56 percent in number of typhoid fever cases. It is not to be supposed that all of it is due to improved water supplies along the National Road, because there has been a very general improvement in both municipal and individual farm and homestead sanitation, not only along the highway but also throughout the entire territory. But the benefits of improved roadside sanitation have been so marked that they have resulted in a demand for improved private water supplies and for better sanitation generally, so that the influence of the Seal of Safety has been both specific and general, and a considerable percentage of the decline in typhoid incidence may be fairly credited to it."

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IN ASBURY PARK, NEW JERSEY where systematic immunization has been carried out since 1923, there were no deaths from diphtheria in 1929 or 1930, and only one case of the disease in each year.

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Not the least important factor in Thio-Bismol therapy is the coöperation of the patient; the injections are so well borne and their effects so manifest that the patient is more than willing to continue the treatment for the necessary length of time.

Thio-Bismol, alone or in conjunction with arsphenamine, produces rapid therapeutic improvement, demonstrable by serologic tests and regression of lesions.

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Boxes of 12 and 100 ampoules (No. 156), each ampoule containing one average adult dose (0.2 Gm.—3 grs.) of Thio-Bismol, to be dissolved, as needed, in sterile distilled water, a sufficient amount of which is supplied with each package.

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—Cincinnati has been ranked as third among "honor cities" in health rating, according to information received by Dr. William H. Peters, Cincinnati health commissioner, from the United States Chamber of Commerce.

—At a recent meeting of the Coordinating Committee of the Cincinnati Public Health Federation, it was reported that 100,000 leaflets had been distributed and numerous addresses made before public gatherings on the advantages of periodic health examinations; that the second of a series of examinations of several thousand persons in various occupations had been completed by the Heart Council, and that a third of a series of examinations of 100 negro factory workers had been completed during the summer under the joint auspices of the Public Health Federation, the Anti-Tuberculosis League and the Heart Council.

HOSPITAL NOTES

—Total expense of operating the 19 hospitals of Cleveland participating in the Community Fund during 1929 was $5,500,432, according to a survey completed by the Cleveland Welfare Federation. Of this amount $951,212 was paid from the Community Fund. Income from earnings totaled $3,622,780; endowments and investments accounted for $772,090 and miscellaneous income was $98,562. A total of 69,820 patients were given 793,846 days of care by the hospitals, full pay patients totaling 20,488; part pay, 35,419, and free patients, whose expenses were paid by the Community Fund, 13,913.

—Miss Alice Walker has been named night superintendent of the Middletown Hospital, succeeding Mrs. Lillian Keller, resigned.

—Frank E. Chapman, director of Mt. Sinai Hospital, Cleveland, since 1915, has been appointed successor to Dr. Karl Van Norman as director of the Western Reserve University hospital group which includes Lakeside, Babies and Maternity hospitals. John R. Mannix, formerly superintendent of the Elyria Memorial Hospital, has been named Chapman's assistant.

—Marie A. Wooders, formerly of Red Wing, Minn., has been appointed superintendent of nurses and head of the nursing school at the Springfield City Hospital.

—Gates' Hospital for Crippled Children, Elyria, was bequeathed the income from a $45,000 trust fund left by the late Mrs. Carrie A. Patch.

—Cleveland—Michael Saunders, formerly of Mansfield, who died recently specified in his will that his $125,000 estate be divided among Charity

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and St. Alexis Hospitals, Cleveland; Mt. Carmel Hospital, Columbus, and Hinde-Ball Mercy Hospital, Mt. Vernon.

—The following appointments to the resident and intern staffs of St. Alexis' Hospital, Cleveland, have been announced: Dr. E. R. Rinaldi, Ohio State University, medical resident; Dr. W. F. Boukalik, Ohio State University, surgical resident; Dr. C. E. Nuckolls, University of Virginia, surgical resident; and Dr. C. H. Bernard, University of Kansas; Dr. H. J. Budzynski, St. Louis University; Dr. E. W. Lakner, University of Michigan; Dr. J. W. Ockington, St. Louis University; Dr. J. W. Pastor, University of Louisville; Dr. P. Shaughnessy, Creighton University; Dr. L. H. Speno, Cornell University; Dr. C. E. Zeithaml, Western Reserve University, interns.

—Appointments for the ensuing year have been announced as follows by the assignment committee of the Findlay Home and Hospital medical staff: Dr. J. C. Tritch, chief of staff; Dr. J. V. Hartman, vice chief of staff; Dr. J. M. Firmin and Dr. J. V. Hartman, surgical staff; Dr. Don B. Biggs, obstetrics; Dr. Earl J. Thomas, medical; Dr. H. R. Wynn and Dr. W. J. Fishell, eye, ear, nose and throat, and Drs. D. C. Hughes, W. B. Keator, D. J. King, A. H. Linaweaver, E. W. Misamore, R. D. Whisler, T. S. Wilson, E. B. Herrington, O. P. Klotz, J. H. Marshall, P. C. Pennington, E. E. Rakestraw, T. A. Spitler and H. O. Crosby, members of visiting staff.

—An expenditure of $7,000 for the purchase of new equipment has been authorized by the board of trustees of the Martins Ferry Hospital.

—The new $350,000 home for student nurses at St. Alexis' Hospital, Cleveland, was recently dedicated.

—Projects to have bond issue submitted to voters this fall for funds with which to build new structures or make improvements at present city-supported hospitals are being pushed at Mansfield, Berea and Bucyrus.

—Bids are being taken for the construction of a $60,000 addition to the nurses' home of St. Thomas Hospital, Akron.

—Frank A. Hoover, Alliance, has been named superintendent of the Elyria Memorial Hospital, succeeding John R. Mannix who has accepted a position as assistant superintendent of the University Hospitals group, Cleveland. Mr. Hoover had been superintendent of the Alliance City Hospital since 1925.

—Dr. Walter A. List, superintendent of the Minneapolis General Hospital, has been named superintendent of the Cincinnati Jewish Hospital, succeeding Louis C. Levy, resigned. Dr. List was at one time on the staff of Longview Hospital, Cincinnati, and was for a number of years assistant superintendent of the Cincinnati General Hospital. He is a graduate of the University of Cincinnati, College of Medicine.

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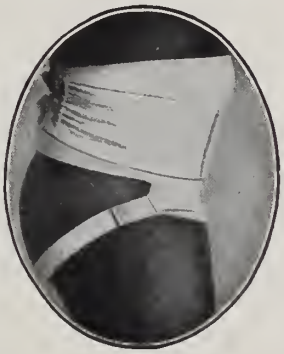
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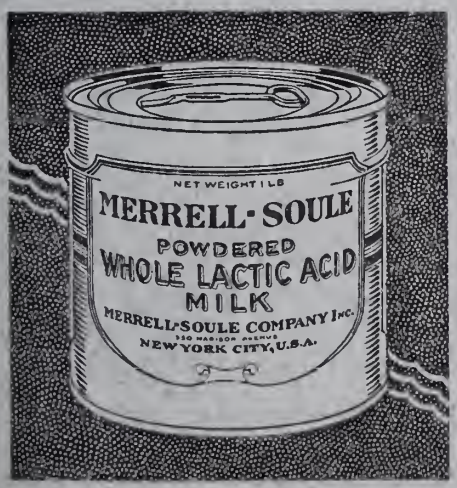
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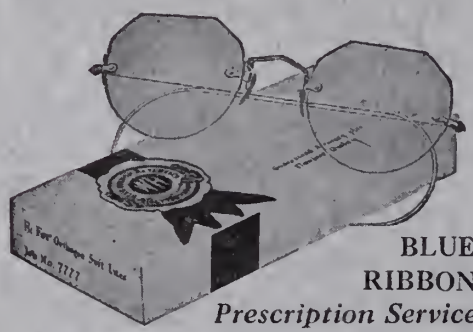
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NOVEMBER, 1, 1930 VOLUME XXVI
Number - - 10

"Many of the founders of our government gave all their wealth and their lives for the right of franchise. The right of franchise is the right to vote. It is the most valuable heritage that the American people have. The right to vote is more than a privilege. It is a duty."—Calvin Coolidge.

GENERAL ELECTION, TUESDAY, NOVEMBER 4th.

Be informed on the ideas and records of the candidates. Not only vote but see that your family and friends also vote.

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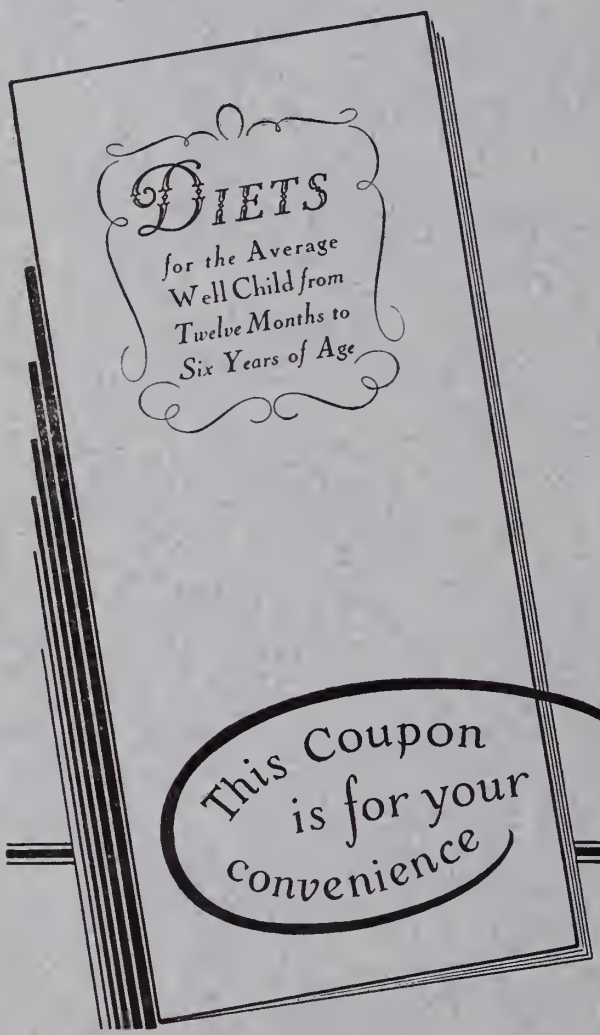
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Ohio State Medical Journal

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Darke	I. H. Hawes, Arcanum	W. D. Bishop, Greenville	2d Thursday each month.
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Wayne	W. B. Turner, Wooster	R. C. Paul, Wooster	2d Tuesday, monthly.
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Carroll	(With Stark Co. Society)		
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Coshocton	F. M. Marshall, Coshocton	J. D. Lower, Coshocton	4th Thursday, April, June, Sept., December.
Harrison	J. M. Scott, Scio	R. P. Rusk, Cadiz	3d Wednesday, monthly.
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Monroe	G. W. Steward, Woodsfield	A. R. Burkhart, Woodsfield	2d Wednesday, monthly.
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Morrow	F. E. Thompson, Marengo	Todd Caris, Mt. Gilead	1st Wednesday, monthly.
Pickaway	J. B. May, New Holland	Lloyd Jonnes, Circleville	1st Friday, monthly.
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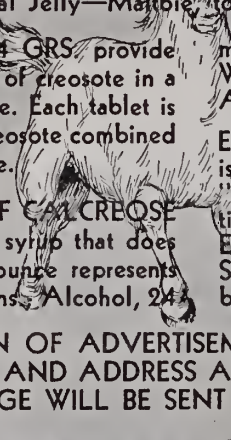
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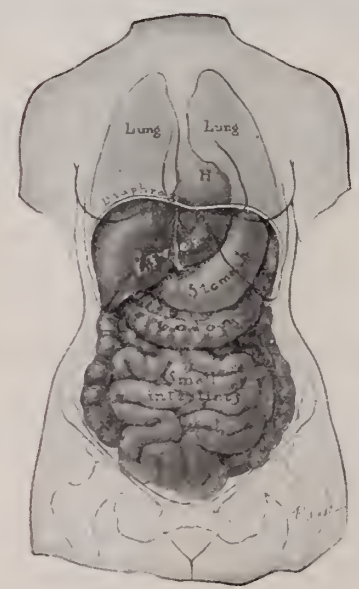


Figure A



Figure B

POSITION AND RELATIONSHIP OF THE VISCERA IN THE FEMALE

Figure A — Normal female figure.

Figure B—Visceroptosis (abdominal ptosis, Glenard's disease, enteroptosis); position of colon, lying behind the stomach, indicated by dotted line.

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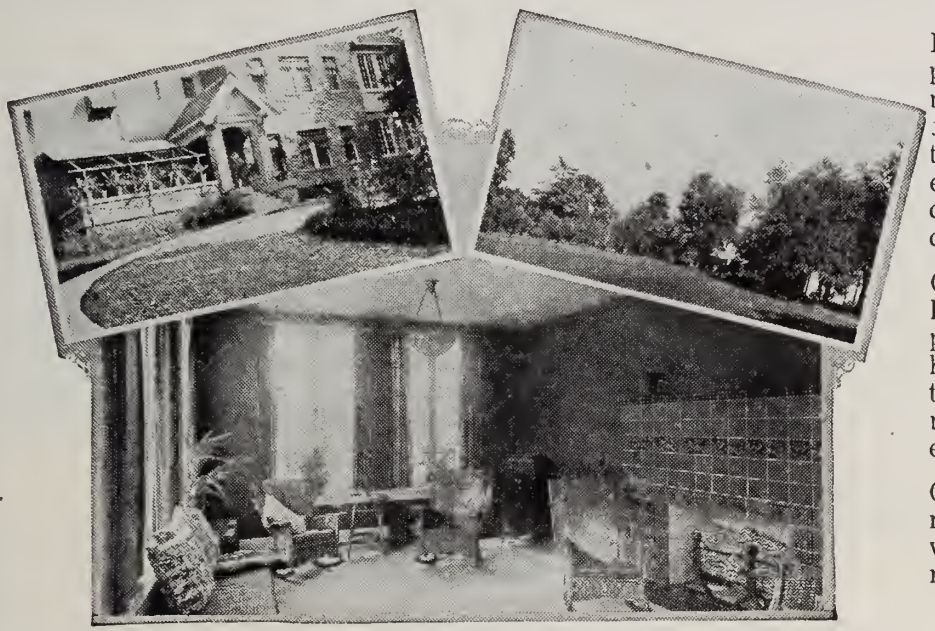
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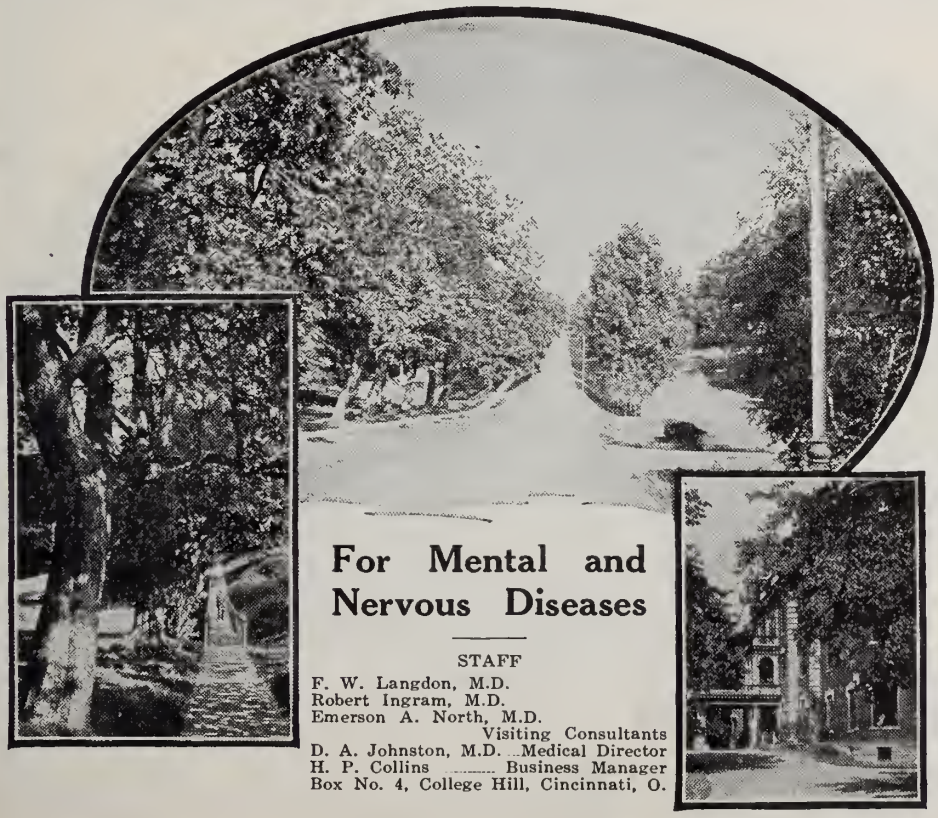
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PUBLIC HEALTH - SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Social Progress of Socialism

Writing in a recent issue of the American Labor Legislation Review on the "Progress of Social Insurance in America," John B. Andrews, New York, secretary of the American Association for Labor Legislation, makes the following astonishing, inaccurate and misleading statement regarding the history of the sickness insurance movement in America:

"It is increasingly apparent that the cost of adequate medical care in America cannot be met without insurance against sickness," Mr. Andrews said. "In 1929, the campaign for a universal system of workmen's health insurance had been advanced to a point where a well-considered bill was passed by the New York State Senate. That promising movement was temporarily checked by disingenuous appeals to prejudice. Upon those representatives of the private insurance companies who joined with a certain element in the medical profession—in a period of post-war hysteria—and denounced health insurance as "Made in Germany,' rests the responsibility for blocking social progress in meeting adequately our sickness problem."

This unfair insinuation that a "certain element" of the medical profession—the inference being probably to organized medicine—denounced health insurance on the ground that it was "Made in Germany" is not only ridiculous and untrue, but an insult to the medical profession of this country.

Since when has the medical profession of the United States placed an embargo on anything beneficial to the health and welfare of the public?

When has the medical profession of this country refused to accept and utilize proved and wholesome contributions to the cause of scientific and preventive medicine, whether they be made by German scientists or research workers of any other race or country?

Who with an unbiased opinion has ever before accused the medical profession of this country of permitting prejudice or "post-war hystria" to interfere in any way with its active, conscientious and effective campaign to eliminate disease and suffering or improve the health of America's millons?

Organized medicine in America has always opposed compulsory health insurance systems like those operating in Germany, England and a number of other European nations, because it believes such programs a menace to competent and high-grade medical service for the public generally, detrimental to the health of the public, and unsound, costly and impractical attempts to solve a social-economic problem. Health insurance programs that have received the support of Mr. Andrews and his colleagues belong to that class of paternalistic and socialistic projects believed by organized medicine to be dangerous to the welfare of the public and a menace to the sound principles of democratic government.

Mr. Andrews' subtle attack on the medical profession is not unique. Similar methods have been used by others seeking to put over their ill-advised schemes on an unsuspecting public by the use of inaccurate and misleading information. The public has many reasons to be thankful that organized medicine has sufficient courage to expose a lot of bunkum falsely termed "social progress."

County Unit as a Foundation

Some members of the medical profession who are intensely interested in medical organization and are foresighted enough to see that only through cooperation, concerted effort and unity can the profession hope to solve the complex problems which it now faces have voiced the comment that too many physicians do not have a sufficient realization of the value of their county medical society, the fundamental unit of organized medicine.

An analysis of the mistake being made by some physicians was made recently by Dr. Harry M. Hall, former president of the West Virginia Medical Association, before the annual conference of county medical society secretaries of that state. Dr. Hall, a keen student of present-day problems of medical practice and an active crusader against the excessive socialization of medicine, declared:

"Most of us take a medical society as a very casual part of our lives. It is a big mistake, and a little glance sidewise will show about every other activity in life very well correlated and functioning with an unusual solidarity and compactness. Medical societies, we think, are going to pass through a rapid metamorphosis in the next five years, and in the end they will either be one of the strongest aggregations of determined men ever gathering together in a single

human endeavor or they will be nothing but a name. We will all have to see that this is what civilization is leading us to, ourselves, or outside forces quite beyond our control are going to make us realize it. From a number of sources the individual integrity of a medical society is going to have its structure tested. . . . The unit of our very existence is the county medical society. . . . If it goes out of existence or is weakened in its force and appeal by anything else whatever, then, sooner or later, goes the state association and ultimately the American Medical Association. Just now we are all playing with fire by dividing our allegience with a great number of other associations and outside agencies. No one of them would stand any show of existence if there were no good county medical societies, no good state associations, and a weakened American Medical Association."

Relative to the degree of activity and interest which the county medical society should take in political, social and economic affairs, Dr. Hall said:

"We are all quite aware that a good many fastidiously minded physicians regard with something akin to horror the entrance of medicine into politics. We must admit a very serious repugnance, ourselves; but, on the other hand, have they a plan to avoid it? We think not. . . . So that, whether we will or not, we are practically forced into consideration of politics as very much a factor in our progress."

Dr. Hall also made a plea for the election of alert, determined and competent men as secretaries of the various county medical societies, for as he declared:

"The job of secretary is not for a weakling. It should be refused by a man to whom it is handed if he feels he is not made for some sacrifice and the inherent realization that he will never get credit for all he performs. To the selfish man who occupies a position for only what he can get out of it, we would advise against assuming the secretaryship. If there is no joy in the work for itself alone, then a man is miscast who assumes the role. But show us a good medical association of any kind, and particularly a county one, and with our eyes and ears closed we will wager heavily on the fact that behind a lot of its success is a good secretary."

Personal Interest and Activity

Frequent inventories are advocated by leaders in industry and business as quite necessary to the continued life and well-being of any business; as a practical method of keeping the concern economically sound.

The same procedure might well be followed by members of the medical profession, declares the *Bulletin of the Medical Society of Milwaukee County* (Wis.), to determine, if possible, to what extent each member may be responsible for some of the conditions which now exist in the medical field.

The Milwaukee *Bulletin* suggests that each physician ask himself the following questions in attempting to analyze just how much he has, or has not, contributed to his profession and to organized medicine:

1. Have I cooperated with my fellow practitioners as I should, or do I criticize them when the opportunity presents itself?
2. Have I given serious thought to the activities of the County Medical Society, and organized medicine as a whole?
3. Have I offered a constructive thought in the cause of medicine, or do I resort to carping and useless criticism?
4. Have I taken proper interest in public health and preventive medicine?
5. Have I cultivated the vision which embraces public welfare and sees beyond the present, and includes the possibilities of the future?

Multiplicity of Meetings

How many medical meetings do physicians feel obligated to attend during a 12-months period and what effect do these meetings have on the activities and functions of local county medical societies or academies of medicine?

These questions have been considered and studied for the past few years by national, state and county medical organizations, resulting in some fairly concrete suggestions as to how to meet the specific problems that have arisen.

The concerted opinion of leaders in organized medicine is in brief that a limit should be placed on the number of medical or scientific meetings requiring the attendance of physicians and that the obligation that the physician owes to his county medical society should be of primary importance.

During the past summer, a special committee of the Cleveland Academy of Medicine has made a thorough study of the question of multiplicity of medical meetings.

This committee has information showing that no fewer than 1,100 medical meetings are held in Cleveland annually, an average of three per day.

The committee in its report to the Cleveland Academy recommends that some sort of a cooperative plan be worked out with the hospitals, institutions and special scientific and medical societies of Cleveland and Cuyahoga County whereby a limit may be placed on such meetings.

It also suggests that the Academy take steps to reduce the number of meetings held under its auspices, if possible.

This subject is one that all county societies and

academies of medicine, especially those in the larger counties of the state, should give thorough consideration and study.

Efforts to minimize the burden imposed on the physician in the matter of membership in various organizations and attendance at their meetings should be undertaken.

It is especially important that interest and attendance in the county medical society or academy of medicine are not jeopardized and that all special organizations be secondary in importance to the official county unit of organized medicine.

Public Extravagance For Indigents

Questions relative to the different influences and effects which hospital and medical service, established primarily for the so-called people of moderate means and indigents, have on the public generally and on medical practice are continuously bobbing up.

At the present time, physicians of Los Angeles are considerably confused over certain angles in connection with the erection of a new unit to the Los Angeles County Hospital, built exclusively to care for indigents.

The original estimate of the cost of the new unit was $11,000,000, but a recent statement issued by the Building Commission indicated that the final cost of the new building would be approximately $16,000,000. The new structure will contain many innovations as well as most of the luxuries found in other costly hospitals or similar institutions.

The questions raised by some members of the Los Angeles medical profession are:

Should a public hospital for indigents excel all private hospitals?

What influence will this hospital have on private hospitals and private medical practice?

"It would seem that a public hospital for indigent citizens could become a menace or pernicious influence to private hospitals and to private medical practice, when such a public hospital excelled in type of construction and equipment the great majority of private hospitals in the United States," stated *California and Western Medicine* editorially in a discussion of some of the questions raised.

"It is to these private hospitals that private citizens who are pay patients must go", that publication continued. "With the present hue and cry concerning excessive hospital costs, would it not be natural for such private patients who do not belong to the indigent or pauper class, to feel that they should not be taxed to maintain institutional care for indigents, not only as good but actually superior to that which they themselves could have, and then only at heavy financial costs and stress?

"Ten million dollars for a single division of one public county hospital, a few years ago, would have been looked upon as an appalling figure. If the total exceeds that sum, to become a possible twelve to sixteen million dollars for the addition of some fifteen hundred additional beds to the institution, and if the annual maintenance charges, because of peculiarities of construction and of arrangements or methods, will run into figures considerably above the costs of private hospitals, then it may be questioned, perhaps, whether something less massive and grand might not have served the indigent sick and injured of Los Angeles County to as good or better advantage.

"And if the massive building should become a visual invitation to lay citizens to contemplate the presumable advantages of so-called state medicine, the members of the medical profession, not only of Los Angeles County, but of California and other states in the Union, will have something to think about."

The Los Angeles situation is another example of how ill-advised and impractical, as well as extravagant, enterprises in the general field of public medicine, may pave the way for greater abuse of medical and hospital charity; create a belief in the minds of the laity that state-supported agencies, or agencies supported by charity-minded organizations or individuals, are better able to serve the public than the privately-owned institution or the individual practitioner, and popularize still more the growing tendency on the part of a large portion of society to look to and expect the state to provide them with the essentials and necessities of life. It is an accepted principle that it is the duty of the state to provide and care for the indigents, but in doing so the fundamentals of good business, good taste and fair play must be taken into consideration.

Importance of Right "Health Consciousness"

At the recent meeting of the British Medical Association at Winnipeg, Canada, Dr. Robert Hutchison, London, made some timely and pertinent observations regarding the extensive development of so-called "health consciousness" among the peoples of practically every nation.

"Fussiness about health increases fear, the great enemy of mankind and impairs the serenity which is the basis both of health and happiness", declared the London physician during his discourse.

A more detailed explanation of what Dr. Hutchison meant by this note of warning is found in a recent address by Dr. William Gerry Morgan, Washington, president of the American Medical Association, on "Some Facts About Some Fads", delivered before an international gathering in Washington.

Taking the statement of the British doctor as his text, Dr. Morgan said:

"When one studies the vast health activities of our generation and realizes the immense amount of time, money and energy expended by the enormous numbers of individuals engaged in these activities, we sometimes wonder what is to be the sum total of the result therefrom. Certain it is that the first and immediate result is as Dr. Hutchison has said, to arouse in the minds of the public fear of impending chimerical disaster. This leads many unthinking people into all sorts of unwholesome fads and practices which more or less seriously undermine their physical health and render unstable their mental and moral balance."

Many instances of how the public in its eager pursuit of health has fallen for the shrewd program offered by some imposter, some cult leader or some fanatic are apparent to any well-informed observer. The harmful effects of the unscientific and radical systems exploited by many diet and physical exercise faddists, as well as "single-system" therapy and worthless cure-alls offered to the public by the thousand and one types of quacks and get-rich-quick artists, are too well known to bear repetition.

On the other hand, there are certain other health movements that promise many material benefits for coming generations providing they are, and continue to be, tempered with the proper amount of conservatism and sound judgment.

An outstanding example of this latter type is that popularizing the periodic health examination which has gained widespread publicity and won many supporters.

The views of Dr. Morgan on this phase of preventive medicine are much to the point.

"Much publicity is being given to the universal adoption of periodic health examinations, especially in this country", he said. "And whereas this practice has much to commend it, nevertheless I feel that it must be safeguarded from being made a fetish. Health consciousness is the slogan of the advocates of periodic health examinations. The danger in this practice becoming universal lies in developing the ill health fear complex. Already this regrettable extreme is beginning to be seen in those of hypercondriacal tendencies. I wish to make my attitude toward periodic physical examinations quite clear. That this new departure in preserving the health of the nation has the very greatest possibilities for good I firmly believe. It is an established fact that any practice which is productive of good has equal potentialities for harm if improperly or intemperately employed, therefore it is necessary that the universal application of periodic health examination should be safeguarded from the outset so as not to arouse the fear complex in the public mind."

The speaker might well have added that the fear complex or distorted "health consciousness" is even more likely to arise from the numerous special propaganda movements which emphasize or over-emphasize particular diseases.

It is quite likely that the great majority of physicians of the country will agree with Dr. Morgan, holding, as he does, that the periodic health examination movement can be a distinct asset to the practice of preventive medicine, providing it is not carried to such extremes that it overestimates health consciousness and builds up a false security in the annual or semi-annual physical examination as a preventive against all diseases and a gilt-edged guarantee of robust health during the interval between examinations.

While the practicing physician should be, and most of them have been, prompt in recognizing the value of periodic health examinations and should consider them an important element in private medical practice, he should at the same time take cognizance of the hidden dangers of this and similar health educational movements, and if possible keep popular enthusiasm for them within the bounds of scientific knowledge and facts.

A New Cabinet Job Is Proposed

Ruth Bryan Owen, congresswoman from Florida, has publicly announced her intention of introducing in Congress a bill which would group the educational and welfare activities of the federal government under a new department with its executive head a member of the President's cabinet.

The proposed department would include, according to Mrs. Owen, the Office of Education, the Children's Bureau, the Bureau of Home Economics, the child health and home sanitation functions of the Public Health Service, the National Training School for Boys and the National Training School for Girls, the District of Columbia Welfare Board, etc.

Mrs. Owen's proposal will undoubtedly meet with strong opposition both in and outside of Congress.

During the past few years there has been a growing feeling throughout the country that the federal government is already over-departmentalized; that a considerable number of the individual bureaus are little more than Santa Clauses for job seekers.

It may be found upon investigation that some of the agenciess which would become component parts of a new department under her proposal, fall within this category.

The demand for simplification and consolidation in the federal government might possibly be met with the highest degree of dispatch by abolishing some of the expensive and unnecessary agencies now existing.

The Fads and Fancies in Obstetrics and Gynecology and Their Cost

JOHN OSBORN POLAK, M.D., Sc., F.A.C.S.; F.R.A.M. (Dublin) Brooklyn, New York

AS we review progress of obstetrics and gynecology for the past twenty-five years we must be impressed with the fact that during this period the pendulum has swung from conservatism to radicalism, and is gradually swinging back to a mid-position based upon a rational knowledge of physiologic pathology. This is particularly evident in the management of such conditions as sterility, pelvic inflammation, birth injuries, cancer, obstetric dystocia due to pelvic contraction, fibroid tumors complicating pregnancy, retroversion, dysmenorrhea, cystic ovaries and a number of other gynecological conditions.

As one reads the history of medicine, it would seem that every second generation goes through this same cycle and the patient pays the cost—for that there is a cost in human life, there can be no question.

STERILITY

Many of you are old enough to remember when every patient presenting herself for sterility was either dilated, curetted and packed or had her cervix discised or was subjected to wearing a stem pessary. Certainly there was nothing rational in such treatment—*but it was the fashion*, and what were the results? About 25 percent of the women so treated became pregnant; so they would have if nothing had been done, while the remaining 75 were made more sterile because of the endocervicitis, the parametritis, the salpingitis and perioophoritis which these procedures tended to produce. We now know that the treatment of sterility depends upon a number of factors and that anteflexion, pin-hole os or a deeply invaginated cervix does not necessarily prohibit pregnancy. Furthermore, it is now recognized that the endocrine glands which control the development of the reproductive function in women play a prominent part in the etiology as well as in the cure of the relatively barren woman—yet, as a result of the enthusiasm of the endocrinologists, these glandular dysfunctions and imbalances have been heralded to such an extent that thousands of women with definite pathological lesions are for months and years subjected to endocrine therapy before an intelligent investigation as to the particular cause of the sterility is ever made.

Every case of sterility must be individualized for the cure of barrenness will always depend upon the recognition and correction of the imperfections in the contracting parties. There are certain fundamentals that even the tyro should know, namely; that for fecundation and nidation of the ovum there must be an active, healthy spermatozoon capable of reaching the internal os—in other words, able to propel itself through the normal cervical mucus, a clear avenue of transit from the cervix through the uterus to the free portion of the tube; and a matured healthy ovum capable of impregnation and able to reach the rendezvous; and finally a healthy endometrium offering a proper resting place for the ovum to imbed, develop and grow. It is apparent, therefore, that the unknown question which at the present time cannot be settled by a physical examination, is the health and capacity of the ovum, for, even determination of the presence of the sex hormone in the blood, only tells that ovulation has occurred, or is about to take place, not the quality of the ovum produced. Could we rid the woman of endocrinal defect, the presence of endocervicitis and so regulate her food as to produce a receptive ovum, the treatment of sterility would be solved.

PELVIC INFLAMMATION

Probably no division of gynecology and obstetrics has received greater attention than the pathology, bacteriology and therapy of pelvic inflammation. Here, again, the pendulum has swung from radicalism to intelligent and rational therapeutics, based on an understanding of the life history, habits and reactions of the several infecting bacteria and the routes of invasion and defensive mechanism which nature can produce to prevent their multiplication and growth.

It is not so long ago that the curette and the intrauterine douche tube were part of the armamentarium of every graduate of medicine and carried about in "the little black bag" of the physician and used to break down protective barriers, under the delusion that infective material was being removed—thus dealing untold injury to the tissue reactions of the host. It has taken over twenty-five years to teach the clinical fact that the curet does not cure leucorrhoea, and that curettage does not completely remove the endometrial lining of the corpus.

Likewise, that the interior of a uterus which is in proper position and properly contracted is capable of ridding itself of bacteria introduced. That this is done, has been repeatedly shown by the work of Curtis, Harris and Brown; these observers introduced streptococci into the puerperal and post abortal uterus and also found the same flora in the uterus immediately after labor, as had been found in the vagina before labor began.

Read before the Third General Session, Ohio State Medical Association, at the 84th Annual Meeting in Columbus, May 13-15, 1930.

They noted that if the drainage, contraction and retraction were efficient, these same cocci could not be recovered for culture, twelve to twenty-four hours after introduction. The great protection to the woman is the development of the defensive mechanism in and under the basal endometrium.

The more firmly the uterus is contracted the greater is the congestion in the terminal venous radicals—these, in turn, allow the escape of serum, of white cells and red cells into the subjacent tissues, and thus produce a reaction which results in a round cell proliferation. These cell changes build up a well defined barrier in *the granulation zone* and cut off the superficial circulation in the infected area and cause the death of the superficial tissues which are desquimated as a tissue necrosis. Hence, it will be seen that contraction and retraction of the normally placed uterus is the greatest protection against infective invasion. If we can keep the infection within the confines of the uterus the therapy is simple. We now know that gonorrhoea is a self limited process which confines its ravages to the glands about the introitus and cervix unless meddlesome treatment carries it higher up. Furthermore, we have learned that when the gonococcus reaches the endosalpinx and there is not a mixed infection that it is possible for the tube to cure itself and so regenerate as to permit subsequent pregnancy.

In a study of some 200 tubes, Curtis has shown that it has been impossible to recover the gonococcus for culture after there has been a subsidence in the temperature and leucocytosis for a period of two weeks. How then, in the face of such facts is it conceivable that men will continue to open the abdomen and remove acutely inflamed tubes, frequently with the contiguous ovary and thus castrate women when nature is competent in many cases to take care of the inflammatory processes and produce not only a symptomatic but a histologic cure.

When I studied medicine it was the fashion to open the abdomen and remove the tubes, ovaries and uterus in cases of acute pelvic inflammation and then drain the peritoneum with yards of iodoform gauze. This was the mutilative period, and acute pus tubes carried with them a mortality of about 10 per cent and the sequela of incisional hernias, post-operative adhesions and all of the other surgical complications which attend peritonitis. Today, we do not operate for infection but operate for the pathology which results in a cured infection when that pathology invalids the woman or causes the patient impairment of function. As a result more tubes, ovaries and uteri are saved and more women allowed to remain potent and retain their sex function.

BIRTH INJURIES

Birth injuries contribute to maternal infections and furnish over 60 per cent of all the gynecology which comes to the gynecic surgeon. These injuries vary in extent from separation of the symphysis and associated fistulae to simple first degree tears of the fourchette. Every woman who has a baby has some injury—less in spontaneous labor of young women with relatively small children than in any form of operative labor. Furthermore, it has been proved by careful statistical study that morbidity is in direct proportion to the amount and type of operative interference—this holds true in the hands of the expert, as in the hands of the tyro.

Birth injuries can be minimized. *First*, by the preservation of the bag of waters until full dilatation is accomplished. *Second*, by the judicious use of anodynes and anesthesia during the first stage of labor. *Third*, by never attempting infravaginal operative procedures before there is complete preparation of the soft passages. *Fourth*, by avoiding the use of pituitary extract until after the child has been born. *Fifth*, by employing a modified Walcher posture during the perineal stage. *Finally;* by the judicious use of anesthetics during the second stage. It is axiomatic that all birth injuries must be repaired—the question is, when and how? Here, again, the pendulum has swung from the position which has been taken by the teachers of the past; that cervical injuries, unless sufficiently extensive to produce hemorrhage, need no attention. To the radical school; Delong, Hirst, Bubis and others who advocate the immediate repair of not only fresh birth injuries, but go so far as to repair old injuries of the cervix, anterior wall and pelvic floor. This is ideal, but circumstances and environment in obstetric practice make it necessary that this ideal should have proper qualifications.

Postpartum parametritis, lochiometra and thrombophlebitis are realities which occur as the result of surgery upon the cervix immediately after labor. This does not mean that these operations should not be done, but it does mean that they are strictly a hospital operative procedure for the expert obstetrician, not the casual general practitioner house operator. I fully agree with Farrar and others who advocate immediate repair of the cervix as a prevention of endocervicitis and subsequent cancer, but I feel that when a woman has been properly cared for during the first stage of labor that the injury to the cervix is trivial and that by proper postpartum attention with cautery or electric coagulation, the parous cervix thus produced is comparable to the trachelorrhaphy of the ordinary operation. Well timed perineotomy will save extensive levator damage—but, here again, if we cut too soon the wound is extensive, and if we cut too late the fascial stretching has already occurred. The advantage of perineotomy is that an incised wound is substituted for a traumaticized wound, hence, the percentage of primary union is much higher in perineotomy than in perineorrhaphy.

CANCER PROBLEM

Cancer is always with us, and like many other unsolved problems has passed through periods of hope, expectancy and discouragement. While we are yet groping for the cause, clinical experience has supplied us with so much unrefutable data as to the life history and the behavior of the growth in the several locations that there is no excuse for the pessimistic attitude of many of the profession regarding its rational treatment.

The exciting causes of cervical cancer are numerous and commonplace. Chronic irritation and chronic infective erosion are known to be necessary to the incidence of cervix cancer—hence, at least in the cervix, malignancy is to a greater or less extent preventable. Such contributions as those of Graves and Smith deserve more than passing notice. Smith collected the follow-up results at the Free Hospital for Women in Boston, in amputation, cauterization and repair of the cervix; and brings out the striking statement that in the cases of cervical lesions with excessive trauma, hypertrophy and ectropion where amputation or the cautery treatment has been applied *there is no instance of carcinoma*, and in more than 3000 cases of cervical injury treated by trachelorrhaphy, but four have returned with cervix cancer. It is easy, therefore, to deduce that the prevention of cervix cancer lies in the proper therapy of the injured cervix. This is not new but has never been so forcefully presented as is done by a perusal of Smith's follow-up results. Graves has called attention to the relation of gynatresia to body cancer, and his observation has been confirmed by others. Healy and Cutler working along the lines suggested by Broder and Martzloff have definitely shown that certain types of cervix cancer are more radio sensitive than others, and likewise, certain types yield better results from operation than from radiation. The anaplastic diffuse carcinoma is the most malignant, and yet, is the most radio sensitive. In this class radiation of group 1 cases yields from 60 to 65 per cent of permanent cures. On the other hand, operation in this same class gives less than 12 per cent of permanent cures. It is, therefore, evident that there must be an individual selection by the surgeon of the case which is to be treated by radiation, or the one in which the cancer is to be removed operation.

Another fact which stands out in the surgical management of cancer, is that unless every vestige of the disease is extirpated and the adjacent glands removed, that recurrence is very rapid, for cutting through cancerous tissue spreads the disease. The average surgeon is not technically equipped to do the radical operation—and unless the extirpation is radical, discredit is brought upon surgery. A surgical conscience is something which is individual. Modern economics is fast destroying it in some localities and as a result the patient pays the cost. Electric coagulation is in its trial stage, and while there are claimants as to its therapeutic value, follow-up by any reputable clinic has not been such as to risk its use when we have such proved agents as the cautery and radium. The cautery was advocated by John Byrne of Brooklyn, in 1891. The Byrne operation destroyed the cancerous cervix by conical amputation. The penetration of the heat killed adjacent tissue cells and set up an inflammatory reaction in the contiguous structures. He had 31 per cent of cures in all cases—just a little better than radium, but he was an artist with the electro cautery knife. Percy, some twenty years later accepted Byrne's principles and improved his method, yet, was unable to duplicate his results.

OBSTETRICAL DYSTOCIA—DUE TO PELVIC CONTRACTION

No condition in obstetrics except that of infection has offered such opportunities for the development of radical procedures as has bony and soft part dystocia. Naturally pelvic contraction divides itself into the *absolute* and the *relative*. Regarding absolute contractions there is no difference in opinion. All absolute contractions must have suprapubic delivery whether the child is dead or alive; for infravaginal mutilation through such a pelvis is so damaging to the maternal parts that the risk is greater than that of clean suprapubic delivery.

The management of labor in relative contractions, however, is a debatable question. Induction of premature labor, symphysiotomy; pubiotomy; Caesarean section; Kielland forceps and version, all have their advocates. Each has had a period of acceptance but when we have come to count the cost, we have rejected them as impracticable. Forceps and Caesarean alone have retained their precedence. The incidence of minor degrees of contracted pelvis range from 10 to 20 per cent in different localities, being much higher among the negro population than among the native born whites. Here, again, each case of pelvic contraction is a law unto itself and depends for its results upon the size of the child, the compressibility, malliability of the head and the force of the uterine contraction—the latter is always an unknown quantity.

In this country, at least, we have come to adopt a plan which gives a maximum number of live mothers and babies irrespective of statistical criticism. Each case should be carefully measured, not only so far as the actual measurements are concerned, but as to the depth, the inclination of the pubis, the width of the pubic arch, the inclination of the brim, the size of the posterior saggital segment and, finally, as to the direction of the axis of drive. This means that each case must be individualized, and this can be done to a greater or less extent before labor occurs.

Induction of premature labor for contracted pelvis, which a few years ago was the accepted

procedure in these relative disproportions, is now little used except in Manchester and London. Pubiotomy, possibly undeservedly, has also been relegated to history; the axis traction, high forceps, later the Kielland forceps have been buried with their fetal mortality. Spontaneous labor occurs in from 60 to 80 per cent of these relative disproportions—hence, the elective Caesarean cannot very well be adopted without doing many needless operations. The basic principle should be to give the woman, in doubtful cases where Mullerization gives the impression that the head can come into the brim and engage an aseptic test of labor, under anaelgesia. Preservation of the membranes, sufficient rest, food and asepsis are the fundamentals which lead to success. When engagement does not occur, low section under local anesthesia solves the problem.

FIBROID TUMORS COMPLICATING PREGNANCY

The one important point to consider in fibroids complicating pregnancy or pregnancy complicating fibroids, is, *the location of the tumor or tumors.* All fibroids have some effect on pregnancy—they favor abortion and premature labor, and, occasionally because of their location cause malpositions. During labor these tumors may prevent engagement and block the pelvis. Usually those in the anterior lip or lower anterior segment are pulled out of the pelvis during labor and offer no serious obstruction. On the other hand, tumors involving the posterior cervical lip or developing in the lower posterior segment are apt to become incarcerated and materially interfere and even obstruct delivery. Fibroids always impair the quality of uterine contractions, interfere with placental expression and favor the occurrence of postpartum hemorrhage. Furthermore, in the puerperium, they are likely to undergo considerable circulatory change — always edema, sometimes necrosis and occasionally infection. All change in fibroids are dependent on their location and their circulation—hence, the former advice of operating on fibroid tumors during pregnancy is not tenable except in the single instance of pedunculated torsioned tumors.

Retroversion has for years been the playground for the abdominal surgeon's imagination. There is hardly a prominent surgeon who has not devised or modified an operation for the cure of backward displacements, and yet, it is a fact that a very large number of these displacements can be corrected and held in place by a properly fitting pessary. This is not true of retroflexions, retroflexion is an acquired condition which develops upon a retroversion so that at some time in the life of the woman this displacement could have been corrected without operative measures.

Opening the abdomen to shorten the round ligaments carries with it a certain mortality and a resulting morbidity by the formation of adhesions, the attachment of intestinal loops, the forerunners of subsequent obstructions. If one thinks for a moment of the hundred and nineteen different technical procedures which have been suggested and are used to hold the uterus in anteversion, one cannot help but be impressed with the fact that there is something wrong in the underlying principle of these operations. This is because of certain factors:

(1) The attempt on the part of the surgeon to fit the case to the operation.

(2) Because uteri vary in weight.

(3) All retroversions, in time, produce pelvic varicosities.

(4) The round ligaments are never of equal size and development.

(5) The uterosacrals which have so much to do with keeping the cervix high and backward vary in almost every case.

(6) The position of the cervix to a great extent determines the success or failure—an anteflexed cervix with deep posterior invagination always favors recurrence.

DYSMENORRHOEA

Dysmenorrhoea has been another money maker for the surgeon. This symptom has been treated as a disease by dilatations, stems, electricity, diathermy, tents, castration, suspensions, resections of the ovary and almost every conceivable device and procedure, often without careful investigation as to the existing stigmata which point to glandular, hypo or hyperplasias. Of recent years the gynecologist has made a more careful study of the endocrine influence, the physiology of menstruation, and the histologic changes which take place in the menstrual cycle, with the result that less operating is being done and more cures are being effected. I can remember as a young practitioner, the popularity of the stem, but as I have grown older in both years and experience, I have had the opportunity of seeing the damage it has done.

Briefly, dysmenorrhea may be classed as; (1) intrinsic, and (2) extrinsic. Under the former group will fall all of the anomalies in development due to endocrinal imbalance including flexions, faulty cervical invaginations, fibroid rests and actual disease of the uterine wall. Under the latter may be grouped adnexal and parametrial lesions which give rise to premenstrual pain because of disturbance in the organ or adjacent organs which control ovulation. The anterflexed retroposited uterus is but one of the stigmata of hypofunction. Likewise, the anteverted, large bodied uterus with fibroid rests is an expresison of hyperfunction—and, until we understand the part which the endocrine glands play in the development of the uterus, and of the physical economy, we will not be able to rationally treat these cases.

CYSTIC OVARY

By this I mean the microcystic ovary in which we find numberless small retention cysts, giving

rise to impaired maturation and ovulation. It is but a few years ago when Massey, Battey, Thomas and others would come into the Obstetric Society with a small pail full of these cystic ovaries which they had removed for dysmenorrhoea. Later it became the fad to resect the ovaries or destroy the cysts with the fine cautery point—now we have learned that many of these are the result of hematogenous infection and of circulatory stasis; and that an ovary in its proper position with a balanced afferent and efferent circulation is of more use inside than out—and surgical castration and resection are no longer the fashion.

In conclusion we can say that with a better clinical interpretation of the physiologic and pathological changes which take place in the woman's pelvic economy; menstruation, labor and infections are being better understood, and that the treatment of these conditions is becoming more rational. Unfortunately, no amount of instruction can control the surgical conscience.

Autonomic Imbalance and Hyperthyroidism

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THIS paper has evolved largely as a response to my own search for a plan of procedure in the understanding and management of an exceedingly large group of individuals coming to the physician for help and advice. This group of individuals is a nondescript one, of varied types and complaints, who are handicapped much to their disadvantage, by the lack of a name which is generally accepted, adopted, and proved by years of usage. Having no name, they have no home. They are however often made most welcome by the surgeon, sometimes by the gastroenterologist, if endowed with leisure and means by the psychoanalyst, and by others, but always and invariably returning to the fold of the practitioner and clinician.

This group of individuals has as a basic premise an instability of the involuntary nervous system. The term autonomic imbalance is used for descriptive purposes, but the expression will doubtless not survive. It lacks brevity, conciseness, and implies speculation. However, the condition, by whatsoever name, will be understood well in the clinical sense by anyone practicing medicine. This disturbance of the sympathetic nervous system, the endocrine system, or the inherent constitutional make-up has been fused and confused with the syndrome of hyperthyroidism. As a result of this confusion, there is often a lack of decision concerning the proper management of these patients. The same patient will receive conflicting advice from various medical sources. He may be advised to have the thyroid removed, to change his method of living with its economic disadvantages, to disregard his disability, or given other prescriptions. The fact that the clinical picture of this disturbance of the involuntary nervous system, sometimes called autonomic imbalance, is practically that of hyperthyroidism, so-called, has led to many errors of judgment, many mistakes, and doubtless to occasional fatalities.

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My definite purposes, then, are the delineation of this clinical picture, its possible differentiation from specific thyroid disease, and a discussion of the methods of management. It is not my purpose to presume to settle any of these problems, but to precipitate attention on a subject that is in a very chaotic status.

Our constantly increasing knowledge of the anatomy and physiology of the sympathetic nervous system will eventually bring order to our understanding of these conditions. The term sympathetic nervous system dates back to 1732 when Winslow introduced the name. It was based upon the idea current at that period that the sympathies of the body were induced and controlled by means of the great ganglionated nerve trunks extending along the ventrolateral aspects of the spinal column. The term vegetative as applied to the nervous system was introduced by Bichat in 1800. It was his idea that life was composed of an animal and a vegetative function, controlled by two divisions of the central nervous system. The theory of Bichat was apparently not given much credence even by his contemporaries, but the term vegetative survived and has been used as a substitute for the so-called autonomic nervous system, which was later introduced by Langley.

The autonomic nervous system may be regarded as the division of the central nervous system which includes all the neurons lying outside the central nervous system and cerebro-spinal ganglia, except those associated with special sense organs. According to the classification of Langley, the autonomic nervous system is composed of a sympathetic and parasympathetic division. The preganglionic fibers associated with the sympathetic division are components of the thoracic and upper lumbar nerves. Those associated with the parasympathetic division are composed of certain cranial and sacral nerves.

The English school of physiologists, including Gaskell, Langley, and Bayliss, have practically dominated this field of physiology for the past half century. They hold that the involuntary nervous system is composed of two parts, the

sympathetic proper, and the parasympathetic system. The latter includes the cranial autonomic and the sacral autonomic divisions. The sympathetic system is not a complete system. It consists of purely excitor neurons. All the afferent fibers have their nutrient centers in the posterior root ganglions, and no sensory cells exist in the lateral chain. The sympathetic system proper is therefore an essentially motor system.

Gaskell and Langley maintained that there is a double innervation in the regions controlled by the autonomic nervous system. That is, the involuntary muscle and secreting glands are controlled by two sets of neurons, which are apparently reciprocally antagonistic. This dual nerve supply to the very extensive areas under its domain has a very profound influence on the physiology of the various visceral functions. Normally, there seems to be a well regulated balance between the two divisions of this system. This balance is not fixed, but is regulated by a most admirable control, in response to visceral and psychic stimuli in accordance with physiologic needs. It is entirely likely that there is a great normal variation in this system of balances and checks accounting for many differences in individual physiologic reactions.

The involuntary nervous system is characterized by the fact that it acts beyond and beneath consciousness. The system is in constant tonus, but the precise mechanism which regulates this is not known. It is likely to be some central system of control, but has been theoretically ascribed to a chemical arrangement of anions and cations, and also to regulation by hormone action. Lacking precise knowledge of the controlling mechanism normally and in health, it is apparent that any variation in health or constitutional base would produce widespread changes in symptoms and personality. The involuntary nervous system causes changes in the caliber of the bronchi, dilates and contracts peripheral blood vessels, brings about all types of modifications in the sensory and motor activity of the stomach, intestines, and various glandular activities to meet body needs, and alters the rhythm, conductivity, and irritability of the heart muscle. Such variations being within normal range may result in many symptoms and signs, with remissions and exacerbations, which may be interpreted as abnormal, but which result in no serious impairment to health.

The sympathetic division of the autonomic system is assumed to be concerned with the general increase in work and the utilization of energy in various parts of the body. The parasympathetic division is more concerned with the processes that take place during body rest. These two groups with more or less opposite functions result in a certain equilibrium.

Cannon and his associates in their Harvard studies have subjected animals to bilateral sympathectomies. These animals have lived in the laboratory for months performing all functions apparently normal. This disproves the previous assumption that the superior cervical sympathetic ganglion or the mesenteric nerves are essential for life. Unilateral exclusion of sympathetic impulses has not produced demonstrable differences in organs with bilateral sympathetic innervation during the period of growth. Sympathectomy does not prevent reproduction and lactation in the female.

Cannon believes that the sympathico-suprarenal system in particular, is of great and primary importance in the adjustment of the internal functions and processes of the body to the special and urgent needs of the body. This is the function, long discussed, sometimes called the emergency function. These investigators point out that without this special emergency function in critical situations requiring vigorous mental and physical effort, there would be no secretion of epinephrin, no rise in the blood sugar content, no polycythemia, no marked splanchnic constriction, with its increase in blood pressure and blood flow, no increased heart acceleration, and no shifting of the circulation to supply the contracting muscles. All these mechanisms adjust the body tissues and organs to meet external emergencies.

Pharmacologic tests and reactions have supplied much of our information regarding the sympathetic system and visceral innervation. Largely through specific drug reactions has come the concepts of vagotonia and sympathicotonia. However, the clinical use of drug reactions does not permit a clear cut differentiation into vagotonia and sympathicotonia. Adrenalin stimulates the myoneural junctions of the thoracico-lumbar involuntary system and atropine paralyzes those of the bulbo-sacral divisions. Small doses of atropine will stimulate the vagus center, and larger doses may paralyze it. There is thus an antagonistic action in the same drug depending on the dosage. The variability in animals and humans to these drugs under different circumstances and at different times is extreme. Epinephrin is generally sympathicotropic and increases the susceptibility to sympathetic innervation throughout its entire extent. Pilocarpin and atropin are generally vagotropic. Pilocarpin stimulates the cranio-sacral system and atropine paralyzes it. The ganglions of both systems are first stimulated, then paralyzed by nicotine. Sensitivity to these drugs may be limited to one organ and not be universal producing a purely local imbalance. The response to epinephrin is obtained by a subcutaneous injection of 0.5 c.c., counting the pulse rate every minute for ten minutes, and reading the blood pressure at intervals of three minutes. This should be carried out over a period of ten minutes, although the usual epinephrin reaction occurs in a few seconds. The reaction may consist of a blood pressure rise, an

increase in pulse rate, subjective distress, fullness in the chest, ashen pallor, and a tremor.

The response to atropine is obtained after injection of 1 mg. The pulse slows in positive cases in four to eight minutes and is due to vagus center stimulation. This is followed by a secondary acceleration reaching its peak in thirty minutes. There may be flushing and dry mouth. The pulse should be counted every minute for twenty minutes.

The clinical picture of the individual showing functional disturbances of the nervous system stimulating hyperthyroidism in some of its phases has been long observed and studied. It has many names. Sometimes, the term "constitutional asthenia" is used in the sense of a relative inferiority or an indefinite abnormality in the inheritent characteristics, whether functional or morphologic. Writers have described constitutional changes, neuropsychiatric factors, organ inferiority, decreased psychological capacity and other states. These abnormalities are intimately bound up with functional disturbances of the vegetative nervous system, which can, without doubt, explain many of the various symptoms seen in the clinical picture. Sir William Osler described it "something wrong with the blastoderm."

This condition is apparently more common in cities and is most certainly increasing with the advance in civilization. The increasing complexities of our modern life by its stress and strain have revealed many of these individuals to whom a more simple life would have permitted quiescence and freedom from symptoms. Crises of life or living are commonly observed to bring out the picture or accentuate it. This occurs in war, disaster, or periods of great emotional conflict.

Clinical studies of autonomic imbalance do not reveal the etiologic factors. This is true where the condition appears for the first time in adult life, and also where it is first apparent in infancy and early life. It is entirely probable that the picture of antonomic imbalance may be detected often at a very early age and that it is part of an inherited constitutional trait. The work of Eppinger and Hess was based in part on the assumption that vagotonia and sympathicotonia were inherent constitutional traits.

The exciting causes may be physiologic or pathologic. The physiologic sex epochs seem to be the most important factors in the production of clinical symptoms. Pathologic factors include infections which readily precipitate disturbances of the autonomic nervous system, to which may be added the various elements of stress, strain, fatigue, emotional factors, and other similar conditions. When the social and family history of these individuals is carefully studied, there will often be discovered an hereditary inheritance or nervous strain, beyond which certain capacities and limitations give way. These individuals are emotionally unstable, show pronounced vasomotor disturbances, and fatigue readily.

The condition has been described in children, most often with gastro-intestinal disturbances, abdominal discomfort, vomiting, or diarrhea. The hypertonicity of infants is usually referred to an autonomic imbalance. Pylorospasm and other evidences of hypertonicity in children is explained by the assumption that there is an overactivity of the craniosacral division of the autonomic system with relief from atropine. If there is hypofunction of the thoracico-lumbar, there should be relief from epinephrin. Abt states that many of the obscure spasms of infancy, the obscure respiratory manifestations with cyanosis, certain skin lesions, and nervous disorders have been associated with anomalies of the autonomic or vegetative nervous system. Lymphocytosis may be present as part of the picture.

The instability may be congenital or acquired. The clinical picture is never quite the same in different individuals. It tends to become fixed and to perpetuate itself. It may persist or disappear, only to recur along the same lines. The condition may be quite latent or quiescent, but when the constitutional trait exists, there is always the potential possibility of the appearance of clinical symptoms. This requires only some marked or overwhelming physical or psychical insult to bring it to clinical reality. Pottenger has called attention to the symptoms of autonomic imbalance in early tuberculosis, which infection has activated the predisposition inherent in the given individual. Any psychical factor such as fear, anxiety, suspected disease, may precipitate the imbalance. It is therefore desirable and important to recognize early cases and potential subjects before the imbalance becomes permanently fixed as a habit. Recognition and correct diagnosis means assurance to the patient and there is no better therapeutic measure than this.

It has been an universal observation that the clinical picture of autonomic imbalance is practically that of hyperthyroidism. The similarity is so striking that much confusion and many mistakes have occurred. Grave's disease was described in 1835, when the exophthalmos, goiter, and tachycardia were studied. Charcot added later the tremor. The conception that exophthalmic goiter was due to hyperthyroidism is due to Moebius. The clinical symptoms of Grave's disease are largely of a sympathicotonic type. There are tachycardia, tremor, sweating, asthenia, diarrhea, to which is added a metabolic disturbance measured by the basal metabolism. Some medical men consider tachycardia to be the only requisite necessary for a diagnosis. There may be also, nervousness, easy fatigue, palpitation, dyspnoea, precordial pain, loss of weight, dizziness, localized areas of sweating, weakness, pains in any region, flushing, cough, insomnia,

frequent urination, excessive salivation, pruritis, and urticaria. In exophthalmic goiter, we may find in the same patient symptoms referable to the sympathetic system such as the tachycardia and exophthalmos, and likewise symptoms due to stimulation of the cranio-sacral autonomic fibers, such as profuse sweating and diarrhea. These two groups are involved in practically all instances in variable degree. The clinical picture is determined by the circumstance that one or the other may predominate. The general behavior of individuals with hyperthyroidism is always more or less abnormal. They are restless, hasty of movement, and very alert.

The clinical picture of autonomic imbalance should be considered in the light of the above description of hyperthyroidism. Patients with disturbances of the sympathetic nervous system or autonomic imbalance will show subjectively, dyspnoea, palpitation, headache, insomnia, and loss of weight. There may also be diarrhea, eye-signs, gastric disturbances, menstrual disturbances, sweating, vaso-motor instability, mental disturbances, tachycardia, cardiac irregularities, tremor, and weakness. That group of symptoms referred to the thoracico-lumbar division of the sympathetic nervous system are accentuated by epinephrin. The basal metabolism is normal.

If one bears in mind the similarity of these two pictures, it is readily understandable that many variations may occur in hyperthyroidism and autonomic imbalance. This accounts for the typical groups described under such names as the forme fruste, larval hyperthyroidism, Basedowoid type, suprarenal insufficiency, and many others. The extremely unstable nature of the involuntary nervous system in many individuals accounts for the fact that in given instances, the picture may be predominantly that of the circulatory system, the respiratory, the gastro-intestinal, the uro-genital, the central nervous system, or any combination of these. The possibilities for these variations is unlimited and infinite.

Barker classifies and lists the long series of symptoms and signs which may be present in disturbances of the vegetative nervous system. Referring to the head and neck, there may be present von Graefe's sign, Dalrymple's sign, exophthalmos, epiphora in some instances, and dry eyes in others, the Loewi sign, excess or lack of saliva. The respiratory system may account for asthma or dyspnoea. The cardio-vascular system may present tachycardia, various arhythmias, vasomotor angina, palpitation, erythemas, and dermographism. The digestive system may show gastrospasm, pylorospasm, hyperacidity, hypoacidity, spastic constipation, diarrheas, or vomiting. The uro-genital system may show pollakiuria, polyuria, oliguria, menstrual disturbances, lactation disturbances, changes in libido and potentia.

The most common and important sign of autonomic imbalance is the tendency for the pulse rate to become fast. This is not a permanent tachycardia. Minor causes, mental or physical, tend to increase the pulse rate. The tachycardia is characterized by its liability, its inconstancy, and its decrease during sleep. The next most common finding is thyroid enlargement. Eye signs are often present. Many patients have tremor, some continuously, and others under the stress of emotional factors. The tremor corresponds almost precisely with the pulse rate in that it is variable and inconstant. The cardiac group is large. They show various abnormalities. There may be aberrant beats, paroxysmal tachycardia, sinus arhythmia or other disturbances of rhythm. Abdominal symptoms may stimulate various organic syndromes. Peptic ulcer and appendicitis are most often confused. Various forms of neurosis or psychoses, usually of the anxiety or sexual types appear. Whatever the type or syndrome which may happen to predominate, it will be more pronounced and aggravated, if a previous diagnosis of disease of this organ or system has been made.

Strouse and Binswanger have called attention to the frequent occurrence in office practice of the clinical picture resembling mild hyperthyroidism without an elevated basal metabolism. They state that the syndrome is similar to the picture long known and described as irritable heart, effort syndrome, neuro-circulatory asthenia, autonomic imbalance, and sympathicotonia. Joseph Miller calls these cases mild unrecognized hyperthyroidism. None have elevated basal metabolism. They are nervous, have indefinite gastro-intestinal symptoms, dizziness, sleeplessness, lack of energy, palpitation, excitability, irritability, headaches, vasomotor disturbances, menstrual disturbances, loss of weight, tremor, and weakness. Strouse thinks that it is easily possible to conceive of this group as a temporary thyroid disturbance, not necessarily to be classed either as hyper- or hypothyroids. He asks whether an elevated basal metabolism is a sine qua non for the syndrome of hyperthyroidism. There is certainly no direct relationship between the clinical manifestations and the degree of basal metabolic rate.

The clinical problem, then, is to demarcate the picture of hyperthyroidism from the picture of a functional disturbance of the involuntary nervous system, sometimes called autonomic imbalance. The distinction is most important because the diagnosis of hyperthyroidism is tantamount to an implied surgical operation. It is probable that precise lines of demarcation between autonomic imbalance and exophthalmic goiter cannot be laid down, but a clinical distinction can usually be made.

The heart rate in exophthalmic goiter tends to be consistently rapid. This is due to several factors. These include the increased metabolic rate, the action of the dilated thyroid arteries and

veins as an arteriovenous shunt, the increased irritability of the heart, or its nervous pathways. Increased basal metabolism means a greater oxygen consumption, requiring the blood to flow faster to carry a larger quantity of oxygen per minute from the lungs to the tissues. The tachycardia is the reaction of the heart to this need and therefore persists during sleep. This type of increased heart rate is basic and does not vary with temporary factors. There may be an added increase from emotional, psychical, or other stimuli, which is present during the waking hours. It is for this reason that the heart rate during sleep is a better indicator of the basal heart rate when all emotional and extraneous factors have been eliminated.

Unfortunately, from a diagnostic standpoint, the pulse rate may not always be high in a given case. The pulse rate should not only be determined on passing, but should be determined in the recumbent position after sufficient physical and mental rest. This same rest will incidentally improve the general or localized sweating, the flushing of the skin, the pounding heart, the palpitation, and the tremor. The same improvement of these latter symptoms occurs in autonomic imbalance. Marked increase in pulse pressure is in favor of hyperthyroidism. The intimate relation that exists between emotional states and visceral and vascular innervations has long been appreciated. It forms the basis of the James-Lange theory of the origin of emotions.

The pulse rate does not run parallel to the metabolic rate. There may be a high metabolic rate in exophthalmic goiter with a pulse rate of 80 or 90. On the other hand, the metabolism may be normal in rare instances and the pulse rate very high. The tachycardia of hyperthyroidism is the only form of tachycardia in which the blood pressure remains elevated.

The well developed case of hyperthyroidism or exophthalmic goiter is easy to recognize. The classic combination of exophthalmos, goiter, tachycardia, tremor, and increased metabolism is obvious and distinctive. As Kessel states, the great mistake is in the diagnosis of this disease when it does not exist.

The syndrome of outspoken exophthalmic goiter is very often the result of surprise or shock in individuals who are predisposed to it by their constitutional status. It is the inability of the individual to accommodate himself to emergencies for which he is not prepared. Moschowitz describes these susceptible individuals as neurotic, high strung, sanguine, emotionally unstable, with extreme variations between ecstasy and depression, intolerant, vacillating, subject to violent passions, and maniac sometimes. This type of individual develops tachycardia and tremor from taking thyroid preparations, while the calm, phlegmatic, unemotional type rarely does.

The fact that disturbances of the autonomic nervous system occur in exophthalmic goiter and hyperthyroidism is given as an indication that there is a relationship between the two conditions. Blumgarten asks the question whether one or the other stands in the relation of cause and effect. It is probable that the relationship is from the autonomic imbalance primarily to the exophthalmic goiter secondarily. Direct transition seems to occur. If exophthalmic goiter is arrested or undergoes a state of remission, the individual reverts to his former state of imbalance, according to Kessel. He does not become normal. It is for this reason that it is so difficult to determine the true diagnosis in many reported or operated cases. The Goetsch test is not pathognomic. Sensitization may be produced weeks after complete thyroidectomy. The injection of thyroxin is without effect on the epinephrin response and this seems to indicate that the sensitiveness is independent of the thyroid gland. This test is not, therefore, a basis for surgical selection.

Enlargement of the thyroid gland in each group, autonomic imbalance and true hyperthyroidism, is common and leads to many complicating factors. The public has become goiter conscious. The doctor is asked daily one or more times by apprehensive and anxious patients "Have I a goiter"? This situation has come about for many reasons. There has been a very intensive lay campaign in the education of the public in popular health matters. The use of iodine by school children, the question of iodine in salt, the great frequency of lumps in the neck, the enormous vogue for surgery in thyroid enlargements, the great increase in nervous states in our modern civilization, have all stressed the thyroid as the cause of a condition which was to be feared and prevented. The lay public has been taught to jump to the conclusion that lump in the neck, rapid pulse, and nervousness, mean thyroid disease with its implied surgery. The careful, conscientious physician is often swept off his feet by the urge to surgery in these nervous individuals on the part of the friends and family of individual patients. The impression is prevalent that these cases are potentially surgical, and where the physician advises rest and observation, he may be obliged to bear the criticism of improper diagnosis and advice, when this particular patient is later sent to operation. The huge series of untold thousands of operated patients in various clinics gives the impression popularly that this condition is almost universal and accentuates its possible existence in the given patient. Many individuals with such disturbances of the sympathetic nervous system have gone to operation in my own personal experience without any permanent relief. The psychic impression of the operation, the knowledge that the thyroid is out, the relief of the anxiety neurosis, the enforced rest before and

after operation, the dietary restrictions, all tend to the relief of the nervous symptoms.

The fact that many of these nervous individuals have a concrete, visible thing like a lump on the neck has made it easy to inculcate in the popular mind the conception that enlarged thyroids mean hyperthyroidism or dysthyroidism. Goiter as well as appendicitis, has become equivalent to required operation. My plea is for more operative procedures when indicated in true cases of exophthalmic goiter or hyperthyroidism in the effort to prevent later disability and death from auricular fibrillation and myocardial degeneration, but fewer operations in instances of autonomic imbalance or disturbances of the involuntary nervous system where the only relief could come from the psychic impression of having had removed the visible lump in the neck.

Thyroid enlargements may be hyperplastic, colloid, or adenomatous. Any or all of these findings may be found in normal individuals, or in the presence of exophthalmic goiter, toxic goiters, or myxedema. Also, it does not follow that individuals with enlarged thyroids are potential subjects for later toxic changes and symptoms. Simple goiters do not often change to the exophthalmic type. Experimental evidence does not bear out the conclusion that thyroid hyperplasia and adenomatous changes mean hypersecretion or hyperfunction.

The architecture and morphology of the thyroid has been clearly pointed out by Marine in his classic work. He has shown how the lack of iodine results in hyperplasia associated with vascular congestion leading to visible and palpable swelling. Following the administration of iodine, the gland tends to involute and become colloidal. The gland becomes smaller. He shows that a colloid gland is one which has been hyperplastic, but is resting after sufficient iodine. Secondary hyperplasia may again occur in this colloid goiter. The anatomic picture does not correspond to the clinical picture as far as the epithelial changes and colloid are concerned. The normal gland contains 1 mg. iodine per gram dried thyroid tissue. The iodine content is in inverse proportion to the degree of hyperplasia present.

If tumor growths are excluded, thyroid enlargements occur from hyperplasia or colloid changes. Hyperplastic glands show the epithelium to be higher, the colloid less in amount, the alveolar walls sometimes plicated, an increase of the intercellular substance, increased vascularity, and round cell infiltration of the stroma. The colloid gland shows much colloid, distended alveolar spaces, flattened epithelium, and relatively enormous thickening of the walls of the blood vessels. Many variations occur in each type, such as hyperplasia in a colloid gland.

Warthin states that the pathologist finds epithelial hypertrophy in the thyroids of persons who never presented any evidence of hyperfunction. He states that as far as the thyroid epithelium is concerned, there are no histologic criteria which give a pathologic unity to all the forms of clinical thyroid hyperfunction. He considers the most striking feature of the thyroid gland of exophthalmic goiter or toxic adenoma to be the presence of hyperplastic lymph nodes with germinal centers showing the characteristic lymphoid exhaustion of the thymico-lymphatic constitution. Warthin concludes that it is apparent from this that a constitutional defect of the thymico-lymphatic system underlies every case of exophthalmic goiter and toxic adenoma. Adenomas of the thyroid, aside from size and mechanical effects, are of no clinical importance unless they be associated with some defect of the thymico-lymphatic system. Warthin makes no distinction in this respect between exophthalmic goiter and adenoma. This underlying constitutional state is predetermined at birth and only in its presence will thyroid toxicity develop. He points out that the general conception of hyperthyroidism is constantly enlarging by the addition of symptoms and signs. This clinical concept is being made a convenient term to fit all types and variations of this large group of symptoms. He prefers to group them in a special constitutional type for which the name Graves constitution is used.

Graves constitution shows certain characteristics. These include slender skeleton, bright eyes, alert facies, muscle tremors, moist, warm, translucent neck, enlarged cervical lymph nodes, thyroid enlargement, eye changes, tachycardia, vasomotor instability, flushing, circumscribed edemas, central nervous system disturbances, excessive emotional response, quickness of perception, unrest, haste, anxiety, insomnia, flights of ideas, hysteria, psychoses, imbalance of the sympathetic nervous system, elevated basal metabolism, increased appetite for food, lowered tolerance for carbohydrates, hyperglycemia, various allergic reactions, psychic sexual excitability, menstrual disturbances, and diminished tolerance for thyroid, iodine, and epinephrin.

All observers have called attention to the importance of the sex epochs in their relationship to thyroid and involuntary nervous system disturbances. Hyperplasia may often occur during life periods associated with sexual epochs. Hyperplasia may occur in menstruation, puberty, or pregnancy. Fully one-third of individuals with thyroid enlargements develop this at puberty. There is a physiologic hyperplasia during pregnancy and the menopause. The sexual epochs of puberty and the menopause are very frequently associated with disturbances of the involuntary nervous system. These symptoms may be classed as vagotonic, sympathicotonic, or any combination or variation of each. This imbalance may exist without thyroid enlargement, or the latter may occur without autonomic imbalance.

Carlson states that the term hyperthyroidism as well as the term vagotonia and sympathicotonia are used in an uncritical sense. The word hyperthyroidism has thus become fixed in medical usage to mean the opposite of hypothyroidism. The latter condition has been proved by clinical and experimental evidence, but the former is only a theoretical assumption.

The increased metabolism remains, then, as the most important means of differentiating true hyperthyroidism or exophthalmic goiter from simple disturbances of the autonomic nervous system. It is not easy to get a truly basal rate. It is seldom obtained at the first determination. Every effort should be made to get the reading under basal conditions with the exclusion of the elements of fear, anxiety, tremor, and emotional factors. Decisions should not be made on narrow margins of elevations above normal.

The transition from a state of autonomic imbalance to exophthalmic goiter or hyperthyroidism may apparently occur, although rarely. It cannot be said that operation in instances of disturbances of the vegetative nervous system will prevent trouble later in life. The only thing that operation may do in this very considerable group is to remove an anxiety neurosis with the thyroid enlargement. It cannot and does not remove the underlying basic disturbance which flares up later in various clinical manifestations, much to the disappointment of patient and physician. This means that the physician should educate these patients very early in life that his symptoms are not in primal relation to the lump in the neck. He should be taught that he has certain constitutional disturbances, perhaps not altogether clear, which show themselves by certain manifestations, especially after infections, fatigue, or mental stress and strain. They are not especially difficult to group, sort out, and classify. These patients should be subjected to certain principles of education in the sense that they should be aware of their limitations and capacities. Knowing these, it is much easier to keep within these restrictions which are not usually irksome. This procedure is infinitely better than to permit individuals of this type to come up from the age of puberty with anxiety and fear of goiter. The good that the lay campaign against goiter has done should not permit it to over reach itself to the disadvantage of everyone.

The management of these patients means the recognition of this unbalanced nervous state by the physician as the first step. The patient should be impressed with the fact that his variable symptoms and fears fall into a well known classification based on inherited traits. There should be a prompt dissociation of these symptoms from the goiter picture. The enlargement of the thyroid itself should be minimized and not considered as the center from which all his troubles flow. This can be done with a great deal of conviction by an understanding physician who has ruled out true exophthalmic goiter or thyroid disease by careful study and some observation. Definite elevations in basal metabolism should be demanded as a sine qua non before the diagnosis of true thyroid disease in this sense is made. Studies in a critical sense of the heart rate, pulse rate, tremor, and other data mentioned above will enable a differentiation to be made.

Understanding, education, assurance, and reassurance are the best therapeutic agents for this condition which cannot be fundamentally removed. These factors used by the medical man will take the place of the psychic effect of operation. A casual "don't worry" by the medical man cannot substitute for the profound impression of hospitalization, surgeons, and operations. The medical man should be keenly alert to turn over for operation instances of true thyroid disease before the heart has been permanently damaged; but the type of patient herein considered has no place within the domain of things surgical.

Atropine is the most important drug for use in instances of autonomic imbalance. It should be used with considerable skill to determine the optimum dosage. Large or small doses may be required. Novatropin (homatropin methyloromide) may be preferred as a substitute to lessen spastic states and parasympathetic hypertonus. It is said to be fifty times less toxic than atropin and equal to it for lessening spasm and tonus. The average dose is 2½ mg. twice daily.

Parasympathetic tonus is also lessened with Collip's parathyroid-hormone given with calcium lactate. Fifteen units of parathormone (Collip) may be injected twice weekly with 6.0 calcium lactate daily.

Sedatives are often indispensable and the numbers of these are legion from which one may choose.

In conclusion, acknowledgement is made for having drawn freely from the studies of Kessel, Hyman, and Lieb, whose early work in this field has been most important.

CONCLUSIONS

1. The term autonomic imbalance is used to indicate an instability of the involuntary nervous system, which is based on a constitutional or inherited state.

2. The clinical picture of this state is variable and poorly defined, but resembles the clinical picture of hyperthyroidism.

3. Autonomic imbalance is apparently increasing, especially in cities, and is being recognized in early life or infancy.

4. The most important differential sign from hyperthyroidism is the absence of any rise in the basal metabolism.

5. Due to the similarity of the two conditions, many instances undoubtedly come to operation without any relief excepting a psychic improvement.

6. Patients with autonomic imbalance are best managed by a full understanding on the part of the patient and physician of the fundamental circumstances underlying the condition with assurance that the thyroid enlargement is not the basic cause of the nervous state.

7. Atropin, novatropin, and sedatives are the drugs of greatest value.

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DISCUSSION

WILLARD C. STONER, M.D., Cleveland: Definite knowledge of the histopathology of the autonomic ganglia and ganglion cells including the central autonomic centers in relation to disease is as yet very meager. However, evidence is available to indicate rather clearly that many disease processes are associated with lesions of the autonomic nervous system. In certain acute and chronic infectious diseases the autonomic nervous lesions are due probably to the toxic effects of the disease and may play a prominent part in the progress and termination of the disease. In certain cases lesions of the autonomic nervous system may be an etiological factor in the disease. It must be accepted that in certain endocrine disturbances such as hyperthyroidism, Addison's disease, or in vasomotor disturbances such as Raynaud's disease, the dominant symptoms are referable to functional disturbances of the autonomic nervous system. These disturbances appear to be so largely functional and recognizable histopathological changes of consequence have generally been wanting. That the thyroid gland is subjected to regulatory nervous influence is well known and on the other hand it is well known that the thyroid hormone exerts a functional balance on the autonomic nervous system. There are examples of thyroid hyperactivity changes resulting from irritation to stimulation of cervical sympathetic ganglia and on removal of the source of irritation the symptoms subsided but in spite of these observations there is no conclusive evidence that changes in the autonomic ganglion cells represent a definite etiological factor in the production of hyperthyroidism. Whatever changes take place are looked on as a result and not as a cause of the disease, nevertheless certain symptoms of hyperthyroidism are definitely referable to sympathetic stimulation, such as tachycardia, exophthalmos and increased perspiration, which of course are directly the result of increased thyroid hormone resulting from sympathetic stimulation; thus a vicious circle is established.

The well marked case of thyrotoxicosis as represented by toxic adenoma and exophthalmic goiter is not difficult to diagnose. The cardinal signs and symptoms are definite and represent common knowledge so that a detailed review of the same at this time can have no helpful purpose. It is the less well marked case that leads to confusion and uncertainty in diagnosis and since the routine application of basal metabolic rate observations more definite differentiations can be made, but if faulty tests, erroneous diagnoses may likewise occur.

In the well marked case of hyperthyroidism basal metabolic rate observations become a matter of confirmatory interest and even the faulty test should not mislead. As has been pointed out by Dr. Levison the psychoneurotic states characterized as autonomic imbalance with the clinical diagnoses termed effort syndrome, irritable heart or neuro-circulatory asthenia, may lead to confusion in diagnosis with that of the milder hyperthyroid states. However the clinical picture does not entirely parallel either toxic adenoma or exophthalmic goiter. They occur at a younger age such as was true in the soldier boy in the late war; they do not represent geographical distribution and if goiter (simple) is co-existing, the thyroid enlargement dates back to puberty. The vasomotor reactions are quite unlike toxic goiter, cold clammy cyanosed extremities in contrast with the hot moist skin of the toxic goiter. If dyspnea is present, it occurs after emotional excitement rather than physical exertion. Do not have the gastrointestinal crises of toxic goiter but tend to constipation. They do not appear ill as the toxic goiter and manifest introspective nervous signs. Tachycardia is not constant, very variable and is lessened on physical exertion. Blood pressure is variable, may or may not be hypertension. Heart is never hypertrophied and there is no increase in lymphoid tissue such as enlarged spleen and thymus. Basal metabolic rate never increased of consequence whereas toxic adenoma increase is from 15 to 80 per cent and exophthalmic goiter 20 to 110 per cent or higher. Course not influenced by Lugol's solution nor rest. Auricular fibrillation never occurs and a subtotal thyroidectomy has no effect on the clinical picture.

The condition is not characterized by weight loss and of course there are none of the characteristic eye signs unless in the unusual case with so-called familial "pop eye". The best treatment seems to be that of skillful neglect, assurance, liberal doses of persuasion, occupation, diversion and exercise; quite the opposite program for the toxic goiter case. The goiter case can be managed satisfactorily only in the hospital, whereas the psychoneurotic will not hospitalize well. The most common error in diagnosis results from lack of repeated basal metabolic rate observations with the proper cooperation of the patient. Neuro-circulatory asthenia was a relatively common condition in the World War in America as well as France but less so in the Army of Occupation. In an analysis of the hospitalized cases in the Base Hospital at Camp Gordon, Atlanta, Ga., I found neuro-circulatory asthenia was present very commonly. Earlier, as President of a Heart Board at Camp Sherman, I found neuro-circulatory asthenia made up no small per cent of the heart cases reviewed by the Board. In France in a 10,000 bed hospital in the zone of advance, back of San Mihiel, I found neuro-circulatory asthenia cases very frequently. In the occupied territory at Treves, Germany, in a 2500 bed hospital, neuro-circulatory asthenia was relatively uncommon.

In reviewing the cases studied in my office over a period of five years in which 3710 cases were studied, there were 678 cases or 18.3 per cent of psychoneurosis, either associated or unassociated with organic disease. The diagnosis of neuro-circulatory asthenia was not made in a single case. 77 cases of toxic goiter were diagnosed.

It is striking to contrast the infrequent occurrence of the condition termed "neuro—circulatory asthenia" of peace time with the frequent occurrence during the World War where it was not a result of shell shock necessarily. It is argued that this autonomic imbalance state may represent a background for the occurrence of toxic goiter, but toxic goiter developed infrequently in the war service in spite of the tremendous factor of emotional stress. Earlier in the war service poor discrimination confused the diagnosis of toxic goiter with neuro-circulatory asthenia, just as poor discrimination in France

confused the diagnosis of pulmonary tuberculosis with that of non-tuberculous subacute respiratory infections. Very occasionally toxic goiter diagnosis may be confused with concealed pulmonary tuberculosis and not infrequently an erroneous diagnosis of heart disease is confused with a goiter heart. The goiter patient should have bed rest in a hospital, not ward, and basal metabolic rate observations under proper conditions. The case with uncertain diagnosis will be made certain; the surgical case will be prepared for surgery, and the occasional case that will satisfactorily respond to medical management will be saved unnecessary surgery, and the neurasthenic with a lump in the neck will leave the hospital without the luxury of the surgeon's knife.

Brachial Plexus Palsies

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AMONG peripheral nerve wounds in war, lesions of the brachial plexus were very common. In civil practice, however, if we exclude Erb's birth palsies, brachial plexus lesions are something of a rarity. Three such cases with certain rather unusual features having presented themselves to my observation during the last year, it was considered worth while to report them with a review of the literature on the subject.

The study of phylogeny and ontogeny is so important to neurology that even in so simple a thing as a brachial plexus lesion we gain enormously by a consideration of the developmental anatomy.

Axial or truncal musculature has a morphologic segmental arrangement of its nerve supply. Thus in the groups of muscles known as the erectores spinae the spinal nerve innervates its corresponding myomeric segment and not individual muscles. In the extremities, however, this relationship is replaced by a pluri-segmental arrangement so that each muscle is innervated by nerves from several segments. Thus plexus formation is necessitated.

By considering the development of the extremities a better understanding can be had of the formation of the limb plexuses and their ultimate muscular distribution.

The limb buds in the human embryo appear at about the third week. The cephalad pair lie opposite the lower four cervical and first thoracic vertebrae and the caudad pair opposite the lower lumbar and first sacral vertebrae. The limb buds are developed from the somatopleure by a proliferation of the cells lining the coelom ventro-lateral to the myotomes. The myotomes are present at the axio-appendicular junction but are separated from the limb bud by a limiting membrane. The mesodermal structures of the limb then appear in the limb bud and do not follow the myotomic segmentation nor is it considered likely that the myotomes contribute in any way to the musculature of the extremities.

The cephalad pair of limb buds draw their innervation from the ventral primary divisions of approximately five spinal nerves. The dorsal primary divisions go to the mytotomes. Thus we have demonstrated the fact that the limb buds are the outgrowth of a number of segments and that they are more closely associated with the ventral than with the dorsal surface of the body since they utilize in their innervation only the ventral and not the dorsal primary divisions of the spinal nerves supplying them.

Before rotation and torsion of the humerus occurs, the limb buds present a cephalad or pre-axial border and a caudad or post-axial border, a ventral surface corresponding to the flexor and a dorsal surface corresponding to the extensor. The cephalad or pre-axial border corresponds to the line formed by radius and thumb, the caudad or post-axial to ulna and fifth finger. In the lower extremity the pre-axial border corresponds to the tibia and great toe, the post-axial to the fibula and fifth toe.

The musculature of the limb bud is first represented by two premuscle masses, ventral and dorsal, separated by the anlage of the humerus. The ventral primary divisions of the spinal nerves which grow into the limb buds secondarily split into ventral and dorsal divisions to supply these ventral and dorsal muscle masses. This constitutes the ventral and dorsal divisions of the fully formed plexus which distributes ventral branches to the ventral musculature and dorsal branches to the dorsal musculature. As the limb buds grow, rotation and torsion of the humerus occurs so that the pre-axial border comes to lie laterally from its original cephalad position and the ventral musculature is rotated anteriorly and the dorsal posteriorly. Therefore the anterior muscles of the shoulder girdle and upper extremity represent the old ventral musculature and are innervated by branches of the ventral divisions; and the posterior muscles of the shoulder girdle and upper extremity represent the old dorsal musculature and are innervated by the dorsal divisions.

Some muscles are supplied by more than one nerve. This is due to the fact that certain muscles of the primitive ventral and dorsal musculature fuse to form composite muscles. Thus plural innervation is from the ventral division when ventral muscles fuse, and dorsal when dorsal muscles fuse, but there are certain exceptions when the fusion takes place along the pre- or post-axial lines between ventral and dorsal muscles where the composite nerve supply is from

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branches of both ventral and dorsal divisions. This is exemplified by the brachialis in which the musculo-spiral nerve (dorsal division) and the musculo-cutaneous (ventral division) both participate.

The number of spinal segments which enter into the formation of the brachial plexus varies considerably though generally we think of five segments of origin.

Anatomically there are two main types—prefixed and post-fixed—depending upon a shift cephalad or caudad of approximately one segment in the origin of the plexus. The prefixed has a high cervical origin, a large part of the fourth cervical root joining the plexus instead of just a small twig of communication. There is less of the first dorsal root and no communicating branch from the second dorsal.

The postfixed begins with the fifth cervical root. There is no communicating branch from the fourth cervical. The first dorsal contributes entirely and there is always a small branch from the second dorsal.

This variation in the number of spinal segments contributing to the formation of the plexus apparently is due to the width of the limb bud and its relation to the neural axis. The limb bud seems to act as an attraction to the adjacent nerve fibers. Harrison, in 1907 transplanted limb buds in amphibian embryos to foreign parts of the embryo and showed that a new plexus was formed by nerves which normally never supplied an extremity.

This variation in segmental innervation of certain muscles adds considerable perplexity to the more careful attempts at exact localization of certain lesions.

In a general way, however, we may say that the brachial plexus is formed by the anterior primary divisions of the fifth, sixth, seventh and eighth cervical nerves, and the greater part of the first dorsal. These nerves lie in the posterior triangle between the scalenii. Immediately after entering the posterior triangle the fifth and sixth cervical nerves unite, the eighth and the first dorsal unite and the seventh cervical remains alone, thus forming three primary trunks. Almost at once the primary trunks divide into anterior and posterior divisions. The anterior division of the lower trunk forms the inner cord, and the posterior divisions of all three trunks unite to form the posterior cord. The cords are named according to the position they occupy in regard to the axillary artery. The cords thus break up into the various nerves of distribution. The distribution is best shown by diagram. (See Fig. 1.)

Results of Nerve Lesions. I propose to discuss here only the changes due to complete interruption of the nerve fibers. There are in addition, syndromes of compression, of irritation, and of regeneration but they do not play a part in the cases reported here.

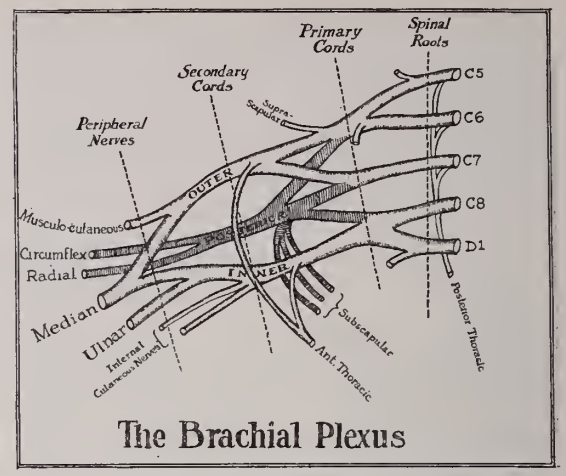


Figure I.

Motor: Efferent motor fibers convey motor impulses to the muscles. When they are divided the muscles supplied by them are at once paralyzed. Faradic stimulation elicits no response from them by the seventh day and in two or three weeks the reaction of degeneration sets in. Muscular atrophy occurs rather slowly. It appears only after two or three weeks and gradually progresses until the muscle is transformed into a thin fibrous cord. It is to be judged mainly by comparison with the healthy side. Atrophy is increased by immobilization of the part, while it may be retarded considerably by massage and proper electrical treatment. When the motor supply of a muscle is severed, the idio-muscular reflexes are intensified.

Sensory: Theoretically when a peripheral nerve is interrupted one should find anaesthesia over its whole cutaneous distribution but this is rarely so because of extensive overlapping. It has been shown that over the trunk the roots from three spinal segments must be divided before an appreciable area of anaesthesia is produced. And it has also been shown that *sensory fibers* are more resistant to traction than motor fibers, and frequently retain their functional integrity when the motor fibers of the same nerve trunk are functionally interrupted. Particularly in plexus lesions do we find sometimes that the sensory loss is insignificant in comparison to the motor loss.

No matter how much we disagree with the interpretation which Head and his associates placed on their observations of disturbances in the afferent system, we must agree with the facts of the observations themselves. Brouwer in discussing the pathology of sensibility clarifies the situation somewhat by substituting the terms vital and gnostic or paleo-sensibility and neo-sensibility for Head's conceptions of protopathic and epicritic sensibility.

To summarize briefly, there are three chief

means by which sensory stimuli are caught up in the periphery. The first is deep sensibility which originates in the muscles, tendons, bones, and joints, and is probably carried by sensory fibers running with the motor nerves. This type is also composed of vital and gnostic elements. The other two systems are superficial and their end-organs lie in the skin and subcutaneous structures.

The vital or primitive type of sensibility responds to painful cutaneous stimuli and to the extremes of heat and cold, whereas gnostic sensibility serves for light touch, discrimination of two points and the appreciation of the finer degrees of temperature. It is a higher and more complex form and has been acquired more recently. Protopathic or vital sensibility in Head's opinion is closely connected with centripetal sympathetic fibers.

Now of what importance is this when a good practical estimation of sensory loss can be obtained with examination by pin-prick alone? Confusion may arise when cutaneous nerves alone are injured and the examiner pricks the patient with a pin over the impaired area and asks him if he feels it and the patient replies yes. What he feels is pressure touch because deep sensibility is intact. Again the system conveying protopathic impulses has a rich peripheral anastomosis but a very definite segmental distribution, while the converse is true of the epicritic system. Thus the nearer the lesion to the spinal cord the more nearly co-terminous will be the zones of anaesthesia to both types of stimuli while the more peripheral the lesion the smaller the area of protopathic loss becomes and it is surrounded by a larger zone of epicritic loss. Finally in prognosis and in observing the return to function these conceptions are important because protopathic sensibility returns at an earlier date.

Trophic changes: In addition to the hypotonia of the paralyzed muscles there are many other trophic and vasomotor changes. The changes in complete division of a nerve are not so striking as those due to an irritative lesion or upon return of pain sensibility. The smoothed out appearance of the skin is due to diminution of the cutaneous folds and levelling of the papillary crests. The skin is dry and does not shed its epithelium which shows itself as a fine branny desquamation which clearly delineates the cutaneous topography of the nerve. The area insensible to pain does not sweat. If a pin is dragged from normal to abnormal parts it produces a quickly disappearing, fine, red line over the normal skin and a white powdery line which persists over the insensitive parts. Pin-prick also bleeds more easily over the anaesthetic area, and the red spots produced persist for days. The hairs lie in an uneven manner and not in sweeping masses. This is probably due to the fact that the pilomotor reflex is abolished in a part insensitive to protopathic stimuli. With the return of pain sensibility the pilomotor reflex becomes more easily elicited than normal and only with the return of epicritic sensibility does the normal reactivity supervene. The growth of the nails may be markedly retarded but Head has shown that this is due to immobilization and paralysis rather than to nerve influence. Longitudinal striations and curving from side to side are common. In irritative lesions, however, the nails may grow very rapidly, curve markedly, and become exquisitely tender.

Vasomotor disturbances are inevitable. Pallor is frequent, particularly in the palms. Cyanosis indicates vasoconstrictor paralysis. On the other hand redness of the skin is usually found in irritative lesions, such as causalgia and is usually accompanied by increase of the sweat secretion.

Insensitive parts are particularly liable to injury. Thus painless ulceration frequently occurs. Insignificant traumata which would not be followed by any lesion on healthy skin, result in severe ulceration under these altered conditions.

Bullous lesions appear, according to Tinel, only as a result of external burning , but Henry Head states that they may occur without any assignable cause. In the one case reported here in which there were widespread bullous lesions there was no apparent cause in the environment.

Etiology: Ruptures of the brachial plexus in adults are produced in much the same way as birth palsies. Any trauma which opens out the angle between head and shoulder and so lengthens the acromio-mastoid distance is apt to rupture the plexus. Injuries of this kind usually produce an upper radicular type of palsy. However if the blow be severe enough all the roots of the plexus may be torn. On the other hand violence applied so as to open out the angle between the arm and the thorax produces strain on the lower roots of the plexus first, and so causes a palsy of the lower radicular type.

In the cases reviewed, the trauma was caused by indirect violence as described above. However, direct violence too, may be applied as seen in dislocations of the shoulder joint where the head of the humerus compresses the secondary cords; or the cords are injured in violent attempts at reduction or by putting a heel in the axilla. Of course stab and gun shot wounds in this region may injure the brachial plexus but these are not common in civil life.

Another source of direct injury to the plexus may be found in the presence of a cervical rib or fibrous band in this position. Sometimes an abnormal first thoracic rib or even an apparently normal first thoracic causes the same type of injury as a cervical rib.

It seems, according to Wood Jones, that there is a constant antagonism between the developing plexus and ribs and that the position of the plexus determines to some extent the existence of a rudimentary rib. This view would seem to be borne out by the fact that a particularly well

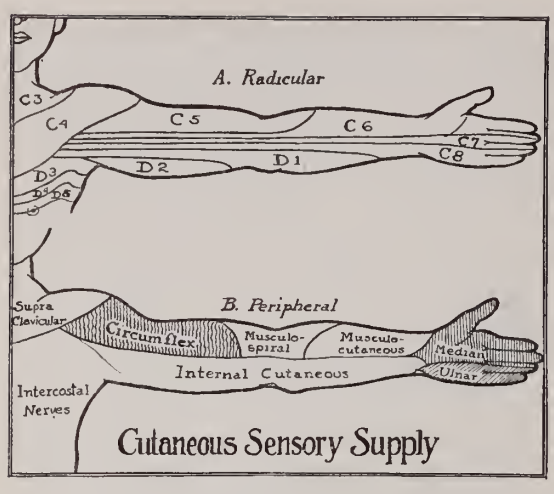


Figure II.

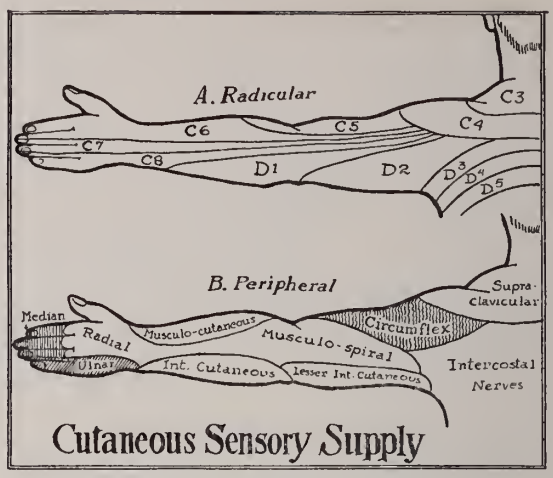


Figure III.

developed cervical rib is seldom associated with pressure symptoms and that a postfixed plexus frequently causes a somewhat rudimentary first thoracic rib to be present. Wingate Todd on the other hand holds that rudimentary ribs represent errors in segmentation and that "the disposition of the nerve trunks alone is insufficient in many cases to account for the presence and length of rudimentary ribs." These views simply bring home the point that in the presence of clinical evidence of injury or irritation of the lower roots of the plexus, the roentgenogram cannot be relied upon to reveal the cause. It is estimated that only five to ten per cent of individuals with cervical ribs have pressure symptoms and of this number by far the most are female.

Speculations as to the reasons for this suggest the more thoracic type of respiration in the female and also the fact that a pronounced drooping of the shoulder girdle takes place in early adult life in the female.

New growths and aneurysms provide more rare causes of plexus palsy. Wilson reports two unusual cases in both of which an enlarged and thrombosed subclavian vein produced a brachial plexus palsy due to pressure. Raeschke reports a serious brachial plexus palsy of three months duration caused by the injection of 1.5% procain to block the plexus in operations on the lower arm.

In offering a differential diagnosis of plexus and near plexus lesions from the standpoint of therapy, it is important only to determine whether the injury is of the high type, radicular for instance, or of the low type, represented by the cords. In the high type surgical intervention is of no avail, while in certain cases the low type surgery may be of decided benefit. Again it may happen that the lesion be extensive enough to involve not only the roots but also the plexus and so produce a very confusing symptomatology. In spite of this, more accurate localization should be striven for. Lesions at the following levels can be diagnosed with a moderate amount of careful examination:

1. Lesions of the peripheral nerves themselves.
2. Lesions of the secondary cords.
3. Lesions of the primary trunks.
4. Lesions of the roots—both intraspinal and immediately extraspinal.

1. In lesions of the peripheral nerves the paralyzed muscles and areas of sensory loss are so commonly known that I shall not consider them. Figs. II and III will combine them all.

2. Lesions of the secondary cords lead to paralysis in the muscles which are supplied by the various nerves derived from the affected cord. Thus the posterior cord forms the musculo-spiral and circumflex or axillary nerves. The subscapular branches are also given off here. A lesion then, of the posterior cord produces paralysis of the deltoid and teres minor through the circumflex and paralysis of the triceps, supinators, extensors of the wrists and extensors of the fingers and thumbs. If the subscapular branches are included the subscapularis, latissimus dorsi and teres major are also paralyzed. The sensory loss corresponds to the distribution of the circumflex and radial nerves. It must be remembered that the region of objective sensory loss is generally less than the area of cutaneous distribution.

The lateral cord forms the musculocutaneous and lateral head of the median, and lesions here result in paralysis of the biceps, coraco-brachialis, brachialis anticus and the radial flexors of fingers and wrist. The area of anaesthesia is along the outer border of the forearm.

The medial cord forms the ulnar, the internal cutaneous and lesser internal cutaneous, and the medial head of the median nerve. A lesion here is manifested by paralysis of the intrinsic muscles of the hand together with some or all of the flexors of the wrist and fingers. The area of anaesthesia lies along the inner side of the arm, forearm and hand.

3. Lesions of the primary trunks produce

motor palsies which are dissociated in the sense that parts of muscle groups which are peripherally unrelated are involved, and the sensory loss follows the radicular and not the peripheral nerve distribution. We must remember that the nerve root is a morphological unit and stimulation of it causes contraction of asynergic muscles, whereas the peripheral nerve is a physiological unit and stimulation of it produces simultaneous contraction of synergic muscles. As there are three primary trunks so there are three main types of paralysis produced at this level. The upper trunk syndrome or Duchenne-Erb type is characterized by paralysis of the deltoid, biceps, brachialis anticus, and supinator longus. Occasionally the pronator radii teres and radial extensors share in the paralysis. Abduction of the arm and flexion at the elbow are lost and the biceps reflex is absent. Supination is impaired. Sensory loss is on the outer side of the arm.

The middle trunk comprises the seventh cervical roots and is seldom injured by itself. Clinically the pectoralis major, the triceps and the dorsal extensors of the hand are involved.

The lower trunk syndrome, so-called Aran-Duchenne or Dejerine-Klumpke type, is characterized by paralysis of the flexors of the forearm and the small muscles of the hand. Claw-hand is frequently observed because of the unopposed contraction of the extensors. Sensory loss is limited to the ulnar side of the hand and forearm.

4. Lesions involving the nerve roots will produce a paralysis of the rhomboids, the spinati and the serratus magnus in addition to previously described palsy. In particular cases, especially the prefixed plexus type, where a large branch from the fifth cervical root goes to form the phrenic there will be in addition a paralysis of one side of the diaphragm. If the lower roots are injured the sympathetic rami which leave by the first thoracic root to enter the inferior cervical ganglion are severed and oculo-pupillary signs (Horner's Syndrome) result. Sometimes the roots are evulsed from the spinal cord with associated hemorrhage and damage to the cord. Signs of cortico-spinal tract involvement thus are sometimes seen in the homo-lateral lower extremity.

CASE REPORTS

CASE NO. 1—W. H. K., age 47, was struck the night of 9/30/29 by a "hit-skip" driver. He was irrational for several days but examination showed compound comminuted fracture of both legs and a complete flaccid paralysis of the right upper extremity. On the second day after this mishap many large, discrete, bullous lesions developed over the hand and forearm. Later rather widespread superficial necrosis took place over the hand and at various intervals the two distal phalanges of the little finger, the tip of the thumb and the tip of the index fingers were amputated. There was distinct myosis of the right pupil with questionable pseudo-ptosis and enophthalmos. The right diaphragm was paralyzed. As soon as the patient's mental status was such as to permit cooperation in examination of sensation this was done. Total anaesthesia extended up to about midarm on the mesial surface and to the point of the shoulder on the lateral aspect. At the present time there is complete atrophy with some fibrous contracture of all the muscles of the shoulder girdle, including the pectorals, serratus magnus, rhomboids, and spinati. The only motion retained is slight flexion of the hand and as this would imply, the ulnar flexors have some substance and tone. The hand is of the flat simian type and the skin is stiff, red and moderately glossy. The sensory return has been tremendous in comparison with the motor. Over the area of distribution of the eighth cervical and first thoracic roots both vital and gnostic sensibility has returned. Over the rest of the arm pin-prick is painful and there seems to be some element of touch and localization present.

This case represents a total brachial plexus palsy with the rupture and stretching occurring at the roots. This level is determined because of the associated palsy of the rhomboids, spinati and serratus magnus and the presence of the oculo-pupillary syndrome. This plexus must be of the prefixed type to account for the associated lesion of the right phrenic nerve.

CASE NO. 2—Mrs. Mary T., age 26, fell from a second story porch April 4, 1929, and landed on the left shoulder. There was immediate loss of use of the left arm. On examination the arm hung flail-like at her side, the shoulder was depressed and the scapula had lost its fixation. There was complete flaccid paralysis of the arm and the muscles of the shoulder girdle had lost their tone. There was total anaesthesia almost to the point of the shoulder on the lateral aspect and considerably lower than this on the mesial aspect. The left eye showed a well marked Horner's syndrome. Atrophy soon set in and when last heard from about six months later, atrophy was almost complete and the head of the humerus could be lifted from the glenoid socket.

Interpretation: This represents a total brachial plexus palsy with rupture occurring in the roots. Treatment of no avail.

CASE NO. 3—E. R., age 17, was thrown from his machine in an automobile accident and alighted on head, neck, and right shoulder. He was reported to have been comatose for four days. When seen one month afterwards he revealed a right hemi-paresis involving face and leg but a flaccid paralysis of the right arm. There was a well marked Horner's syndrome on the right. Upon sitting up in bed he tended to fall to the right. Examination of sensation revealed a loss of protopathic sensibility over the outer half of the right arm extending up to the insertion of the deltoid. Discriminative sensibility was unimpaired. He was also capable of some movement of the right little finger. There were no other sensory changes over the right half of the body. Over the left half, however, extending about to the level of the nipple was loss of pain and temperature sensibility.

X-rays of the skull and spine demonstrated a widening of the left occipito-parietal suture and of the suture between the parietal bones posteriorly. The fracture extended into the right parietal bone. No depression was shown. There was deformity of the body of the fifth cervical vertebra due to a compression fracture. The body was displaced posteriorly about one-fourth inch.

Interpretation: This picture presented confusing elements until the component lesions were resolved. There apparently was some cortical in-

jury which accounted for the right facial hemiparesis. This would also account for the whole right hemi-paresis if there were no cord lesions. The cord compression produced a modified Brown-Sequard syndrome. The injury was confined to the right anterior and lateral columns and so compressed the cortico-spinal, the direct and indirect spino-cerebellar and the spino-thalamic tracts which accounts for the left sided loss of pain and temperature, the paresis of the upper motor neurone type on the right and the tendency to fall to the right when sitting up in bed. However it does not explain the flaccid paralysis of the right arm and so we must postulate injury to the roots of the brachial plexus—particularly the upper root. The fact that the sensory loss in this arm is relatively slight is not unusual, and the fact that a lesion near the spinal segments produces a distinct area of protopathic loss and an indistinct or co-extensive epicritic loss demonstrates one of Head's original observations. The Horner's syndrome in this case was felt to be due to direct injury of the sympathetic chain in the neck or damage to the cilio-spinal apparatus in the cord.

From the standpoint of treatment of this case head traction was applied and the signs of cortical injury and cord compression disappeared fairly rapidly. The right arm has improved slightly. Four months afterwards the patient could move all the fingers slightly, but the other muscles were extremely weak. At the present time he is still unable to abduct or extend and the grip is very weak.

CONCLUSIONS

Brachial plexus lesions present a wide variety of pictures and only careful anatomical and sensory investigations provide the correct anatomico-physiological interpretation. This is important from the standpoint of treatment and prognosis. Many cases recover spontaneously if managed properly. The only fact which calls for surgical intervention is absence of nerve regeneration. It is important to establish the level of the lesion because the nearer the cord it occurs the less becomes the margin of success in recovery by spontaneous regeneration or by surgical intervention.

1608 MEDICAL ARTS BLDG.

BIBLIOGRAPHY

1. "Nerve Wounds", J. Tinel, 1918.

2. "Nerve Injuries and Their Treatment", Stewart & Evans.

3. "Surgical and Mechanical Treatment of Peripheral Nerves", Byron Stookey.

4. "The Afferent Nervous System from a New Aspect", Henry Head, W. H. R. Rivers, and James Sherren. (Brain, 1905, Vol. xxviii, pp. 99-116).

5. "The Consequences of Injury to the Peripheral Nerves in Men", Henry Head and James Sherren. (Brain, 1905, Vol. xxviii, pp. 116-340).

6. "A Human Experiment in Nerve Division", W. H. R. Rivers and Henry Head. (Brain. 1908, Vol. xxxi, pp. 323-450).

7. "Pathology of Sensibility", B. Brouwer. Second Herter Lecture, Baltimore, 1927.

8. Editorial: "Recent Advances in Neurology of the Peripheral Nerves", (Arch. of N. & P., 4:4, Oct., 1920, pp. 433-436).

9. "Motor Disturbances in Peripheral Nerve Lesions", Lewis J. Pollack. (Arch. of N. & P., 14:5, Nov., 1925, pp. 675-684).

10. "Peripheral Nerve Topography", W. M. Kraus and S. D. Ingham. (Arch. of N. & P., Nov., 1920, pp. 259-296).

11. "A Vasomotor Sign of Median Nerve Lesions", Dennis Crile. (Year Book Nervous and Mental Diseases, 1926, pp. 210-211).

12. Milch, H., Amer. Jour. Surg., 5:66-72, July, 1928.

13. "Rib Pressure and the Brachial Plexus", Bramwell & Dykes. (Edinburgh Med. Jour., 1921, n.s. xxvii, pp. 65-88).

14. "Brachial Paralysis from Thrombosis of the Subclavian Vein with the Report of Two Cases", George Wilson, (Arch. of N. & P., Chicago, 1921). V. p. 109.

15. Minutes of the South African Medical Association, Dec. (Med. Jour. So. Africa, Johannesburg, 1920, 1921. Vol. xvi, p. 158).

16. "Paralysis of the Right Diaphragm Associated with Brachial Palsy", M. Zeligs, J.A.M.A. 90: 762-763, March 10, 1928).

17. "Paralysis of the Arm Following Anesthesia of the Brachial Plexus", G. Raeschke. Abstracted J.A.M.A. 83: 1724, Nov. 22, 1924).

NEW BOOKS

Obstetrics. A Textbook for the Use of Students and Practitioners. By J. Whitridge Williams, Professor of Obstetrics, Johns Hopkins Hospital, Baltimore. Sixth enlarged and revised edition. With 17 plates and 730 illustrations in the text. D. Appleton and Company, New York and London.

Manual of the Diseases of the Eye. For Students and General Practitioners. By Charles H. May, M.D., Director and Visiting Surgeon, Eye Service, Bellevue Hospital, New York, 1916 to 1926; Consulting Ophthalmologist to the Mt. Sinai Hospital, to the French Hospital, to the Italian Hospital, New York and to the Monmouth Memorial Hospital; etc. Thirteenth edition, revised. With 374 original illustrations, including 23 plates, with 73 colored figures. William Wood and Company, New York.

Diabetes. Direction for Treatment by Insulin and Diet. By Benjamin F. Smith, M.D., physician and lecturer to St. Joseph's Infirmary, Jermann Hospital, and Jefferson Davis Hospital, Houston, Texas. D. Appleton and Company, New York and London, publishers.

Tropical Medicine in the United States. By Alfred C. Reed, M.D., Professor of Tropical Medicine, the Pacific Institute of Tropical Medicine within the George Williams Hooper Foundation for Medical Research of the University of California. 60 illustrations. J. B. Lippincott Company, Philadelphia and London.

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The Treatment of Glaucoma Without Operation

WALTER H. SNYDER, M.D., Toledo

IN the last few years there has been a marked increase in the study of the etiology of glaucoma and I think more progress has been made towards an understanding of the various factors which lead up to glaucoma than for years before. Glaucoma has well been defined as "a sick eye in a sick body" and the attention which is being paid to glaucoma as a symptom complex rather than a specific disease is indeed encouraging in the solving of this problem and the successful treatment of this condition.

At present we are seeing glaucoma only as a terminal event. The text books state that there is about one per cent of our patients who are victims of glaucoma but in my opinion and in my practice this is far from right. I should say that five per cent was nearer for public clinics and seven or eight per cent would be the percentage of glaucoma suspects in some classes of patients. If we are going to wait until glaucoma can be diagnosed by the patient, our treatment must of necessity be surgical, and until we have a better understanding of the pathology many of our cases will have to have surgical treatment in the end. My idea is that the treatment of glaucoma in the beginning is that which an internist should give and not the exhibition of miotics. All cases of glaucoma do not exhibit an increase of tension as the cardinal symptom and as yet we have no clearly defined and universally accepted definition of what constitutes glaucoma. I do not propose today to give you any such definition nor do I propose to give you a line of treatment which I think you should follow out, but I hope, by calling your attention to some of the work and some of the things that have been said about glaucoma, to arouse your interest to a new and better understanding of this terrible disease.

There has been a perfect avalanche of drugs and new ideas in the treatment of glaucoma—miotics, adrenalin, glaucosan and several allied drugs, all of which have been tried without amounting to very much, and it is all because we are treating a disease in its last stage instead of the first. It would be similar to expecting good results in the exhibition of insulin in the last hour of a diabetic patient. Whether Duke-Elder's ideas are true or not they are at least very stimulating but I am convinced that the solution of it is not entirely an ophthalmological one. If we are to make a resume of the more recent statements in regard to glaucoma, it would be that glaucoma is a symptom complex, that the rise of tension is not always present but is one of the symptoms which may occur in this "sick eye" and is probably dependent upon certain conditions of the fluids and their production and means of exit from the globe. McKee in the last *Journal of Ophthalmology* sums up much of this evidence in a very interesting and entertaining way to which I refer you.

Glaucoma is exceedingly common in people of an emotional temperament and whether this is an endocrine reaction or of the sympathetic nervous system we do not know but if we consider what happens in an angioneurotic edema from an emotional cause, one could easily see that the same thing might happen to an eye ball. In fact there are so many factors in hypertension along both the lines of secretion and excretion that only the most painstaking examination and history will point the way to the possible cause. Duke-Elder in his recent work divides these in three classes; again I will refer you to his excellent book. I am appalled at the various influences which have caused or precipitated an attack of glaucoma. Friedenwald in his Pathology of the Eye has an excellent chapter on glaucoma and as was stated before, I do not attempt to distinguish between which of these various theories is the correct one because they all have elements of accuracy in them.

Priestly Smith in 1879 called attention to a fact which I have seen duplicated many times, "that eyes that were small and whose corneal diameters were less than normal were predisposed to glaucoma" and he might have added also "those who have very large pupils." I may suggest that in this case with the progressive increasing growth of the lens, it would only need an iridocyclitis with the aqueous filled with some cellular material, to effectually seal the junction of the exit spaces. I have in several instances seen an acute glaucoma precipitated by an attack of iridocyclitis which I think lessened the exit capacity of the eye and possibly increased the fluid passing into the eye.

In my opinion there is comparatively little connection between acute glaucoma and chronic simple glaucoma. I am speaking clinically in all my references to cases. I think I have said enough to awaken your interest in an entirely new conception as to the cause of glaucoma. Let me cite several cases with which I have come in contact, all of which resulted in glaucoma.

A girl of twenty-six had several psychic shocks, the death of her mother under shocking circumstances, the serious illness of her brother and his wife at the same time. She developed the goitre complex and then commenced to complain of painful vision. She was wearing a weak minus cylinder but had always noted that she had very large pupils. She came in one morning complaining of this pain and on taking her tension, which we do in many cases, I was amazed to see that it

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was considerably increased. Here I think there was a distinct relation between emotion and her glaucoma. She had never had an iridocyclitis, she did not have an unusually large lens, she did not have a small eye, but she had an eye which lacked only certain essentials to become glaucomatous. In this particular instance she had recovered from the emotional shocks which she had received and with the eserin and a little care, she has practically overcome these attacks. This is related as of a type which is not uncommon.

When this patient has small pupils and is not worrying and has not been emotionally stirred up, she is perfectly comfortable for all the normal amount of work she has to do. Evidently in this case there is an increased secretion of fluid to the eye rather than a decreased elimination.

Another case, a woman of sixty whose entire family have had bad eyes; many of them are dead and no diagnosis could be made except that their eyes had been very painful, which of course does not give us much information, although it might easily have been glaucoma. This woman has small cornea, she has rather large pupils and thinks that this has always been true. She had headaches when she went to school but got no glasses until she was thirty-eight or thirty-nine, when an itinerant spectacle fitter sold her a pair which she used for near work and which she had changed three times in about twenty years, always by these spectacle peddlers. She has a complete set of artificial teeth and says that in her early adult life she had many swellings of the face which we may translate as abscessed teeth. She had several gum boils which she remembers and finally at her third pregnancy had all of her teeth out. The tension of the eye is slightly increased, possibly +1 by finger tension. The slit lamp examination shows a cloudy aqueous; in some parts of the cornea Descemet's membrane has deposits on it. The eye does not show any definite evidences of an iridocyclitis although there is considerable pigment deposited on the anterior capsule and the lens shows undue evidences of senility. It is noticeable too that this eye does not massage to normal which I think indicates a decreased elimination capacity. This woman has a number of things wrong with her generally. She complains of pain in the upper abdomen; her family history is bad but cannot be identified and we have here what might be diagnosed as a chronic simple glaucoma. These eyes in my experience may at any time suddenly develop an acute glaucoma and I doubt very much if there ever was an acute glaucoma developed in a normal eye. This woman would indignantly deny that she had ever had severe eye trouble and yet she had an iridocyclitis at the time her teeth were bad. She has enlarged joints on her fingers, she has had rheumatism, neuritis in the shoulders and arms, all pointing toward a focal infection somewhere which was being evidenced generally.

How should we treat these cases? I hope that you are agreeing with me that before we consider the treatment of glaucoma we must try to find out what caused it, if possible. Now this case must be treated along the lines which are laid down as classical for a glaucoma. If her form fields are normal and her vision can be improved with glasses and the pupil will contract to somewhat of normal size and this result in a lessened tension and she will consent to being watched rather carefully, the best thing you could probably do would be to do these very things.

In my experience these cases are careless and will not consult their physician unless they are suffering from pain or lack of vision. It does not enter into their consciousness that to prevent we must see the patient before the storm has broken. I have never seen a case of acute glaucoma occurring in a normal eye. They either showed evidences of a previous inflammation or gave a distinct history of some such condition having occurred. If in one of these cases we find evidences of an existing focal infection, whether it be teeth, tonsils, gall bladder or prostate, we have something definite to work upon and can hope for a more satisfactory conclusion than if we are not able to locate anything with a causal relation.

In the present state of our knowledge of glaucoma we need not apologize for sticking to treatment instead of surgical intervention. Much, of course, will depend upon the personality of the patient but I might suggest that my line of treatment would be somewhat as follows: If it is an acute case I should operate at once without attempting any search for the cause but as soon as convalescence is established, a careful and painstaking search should be made for the cause and I think you ought to have a very competent internist assist you in this, not depending upon the laboratory technician as is often done. I have had the greatest possible help from diagnosticians who were skilled in the art of searching out obscure causes. If the patient responds readily to miotics and the form field does not decrease and the tension is kept within normal limits and you have found some general cause which you are able to correct, I think you are justified in waiting before suggesting operation; but if the patient is careless, inclined to neglect instructions or you do not find a cause, the correction of which might lead you to feel that you had found the difficulty, then I would advise an operation. As to what operation, I hesitate to decide on my own judgment alone; the ordinary iridectomy does not seem to be satisfactory. The LaGrange is a very difficult one to do successfully; the iridostasis lacks the authority of prominent operators although it is spoken well of by certain men. Possibly the trephining, as Dr. Wheeler does it in New York, is the best of the operations but one must be careful or one will have all the terrors of hypotony to ruin the eye. Dr. Wheeler thinks that more eyes are lost from hypotony than from late infections but even though you operate, this case must be watched very carefully and even then, in many, all one can do is to slow the progress of the disease.

I do not believe one can decide on first seeing a patient or even after the first several visits how much aid one can give this patient as a large percentage of them are associated with arterial disease. Magitot says "that the cause is a locally

increased vascular pressure due to venous congestion." Some theories speak of the effect of histamine which dilates the capillaries. Histamine is produced in the body and its effect is neutralized by adrenalin, so one can see where there is an excess of histamine, the effect of adrenalin would be extremely good. It is probably some such combination as this that renders the effects of drugs so useful in one case and of no use in the other.

I think that we should try in every case but the acute, the effect of treatment before operation. As I have indicated a large percentage of your glaucoma cases will also have arterial sclerosis and as you know this is impossible to cure. Another theory is that the vitreous is a gel. These colloidal gels do not flow as freely as watery solutions do and it is possible for the vitreous to take up water and increase its bulk considerably. If this is true the swelling vitreous would account for the very suggestive appearance that an eye has when the anterior chamber is shallow and the lens and iris is all pushed forward. The colloidal condition is not an easy one to overcome, notwithstanding statements that alkalization helps this condition but this has not been my experience.

As to adrenalin, Gifford has written some very interesting articles on this and reports a case where adrenalin gave a very bad result. All these powerful drugs must be used with great care and in my judgment best in a hospital unless with intelligent patients and frequent calls. I think we have belittled the importance of glaucoma to our patients, especially the chronic type, but it is taking a tremendous toll in sight every year and certainly our handling of this disease has not been improved upon. Gifford thinks that no brilliant results have been obtained by constitutional corrective measures. He does, however, believe that the unstable vasomotor mechanism in which class the angio neurotic edemas and urticaria are factors, and I certainly have found them so and also believe that the focal infections are factors which cannot be ignored.

I have not given you very positive statements as to treatment because I do not think they are justified in the general run of cases but in conclusion may I say that I should sum up my experience as follows:

CONCLUSIONS

A. Acute cases do well under an immediately performed iridectomy which must include the roots of the iris.

B. Chronic cases should be watched and the usual miotics used until there is positive evidence that the case is progressing, in which case I believe an operation, preferably of the trephine type, should be employed.

C. I think we have time enough in all chronic cases to give the non-operative care a full trial before operation.

D. During this period I think every function of the body should be investigated and if we find a marked degenerative condition of the circulatory system with a tendency to venous congestion, besides the use of the drugs, I believe operation is indicated. The internists do not intend to work this case out as from their point of view it is entirely an ophthalmological disorder.

220 MICHIGAN STREET.

DISCUSSION

S. H. MONSON, M.D., Cleveland: While numerous investigations concerning glaucoma have been carried on during the last few years, the pathogenisis of glaucoma is still unknown. However, it has been definitely shown that glaucoma is not a single disease with a simple etiology, but is rather the similar result of many complex factors.

The raised intra-ocular pressure, which is the most prominent feature in the clinical picture, must be considered as a symptom and not regarded and treated as if it were the disease process itself.

From the investigation of Craggs and Taylor, and others, the fact has been established that a high blood pressure in itself is not an essential or even an important factor in the etiology of glaucoma.

While a high blood presure and a high intra-ocular pressure are frequently associated and are to a certain extent inter-related the relation between them is accidental rather than essential, because the intra-ocular pressure depends upon the capillary pressure and a high arterial pressure frequently is accompanied by a low capillary pressure.

Magitot claims that the essential cause of glaucoma is a locally increased vascular pressure, due primarily to venous congestion, the result of periphlebitis, which he claims is constantly present in these patients, mainly in the anterior ciliary veins and also in the vortices.

The safety valve action of the canal of Schlemm in the normal eye, deals with the normal pressure circulation of the intra-ocular fluids and compensates for any sudden increase in the volume-pressure of the globe. When, however, the efficiency of this mechanism is thrown out of gear, whether it be by the formation of peripheral synechia, by sclerosis of the pectinate ligament, or the deposition of iris pigment in its meshes, or various other causes which have been held accountable, then the compensation breaks down and any rise of pressure tends to become cumulative and permanent. Each or all of these factors may exert an influence but in primary glaucoma many considerations point to the fact that obstruction to the exit of fluid is a secondary rather than a primary factor in the etiology of the disease. Further, the gonioscope has demonstrated that in life, in some cases of glaucoma, the angle of the anterior chamber may be perfectly and entirely free.

According to Duke-Elder the causes of glaucoma may be divided into three classes:

(1) Between blood plasma and the intra-ocular fluids (decrease in the salt content and increase of the alkalinity of the blood, with vaso dilatation and increase of the permeability of the capillaries.)

(2) Between the intra-ocular fluids and the vitreous body. (The vitreous being a gel, the main determinent of the variation in the volume of such a system is the amount of water it retains in association with it, which depends largely

on the concentration of the hydrogen ions and electrolytes in the fluid bathing it. That under varying physico-chemical conditions the vitreous can alter in volume to a considerable extent is well known, but what the precise conditions which govern these changes are, has not been definitely determined.

(3) Between the blood plasma in the chorio-capillaris and in the sensory epithelium of the retina, possibly the result of some toxic condition as histamine.

With regard to treatment, it seems fairly definitely agreed upon that in acute cases of glaucoma early operation produces the best results. In chronic cases and in cases of simple glaucoma, the results have not been so good. Parker in discussing the treatment of simple glaucoma reported that in 60 per cent of the cases operated upon, the tension will be satisfactorily reduced and the integrity of the globe maintained, in 30 per cent of the condition will be uninfluenced by operation and 10 per cent may be made worse by operative precedure.

Magitot considers that in glaucoma, we have a sick eye in a sick body, and that its treatment should be generally medical rather than surgical.

Dr. Snyder's plea for the thorough investigation of every function of the body and the medical treatment of chronic glaucoma before resorting to operative measures is a very strong one and merits every consideration.

PAUL G. MOORE, M.D., Cleveland: In discussing the subject, "The Treatment of Glaucoma without Operation", Doctor Snyder has brought out the following points:

(a)—That glaucoma is possibly a symptom complex rather than a distinct entity.

(b)—That probably colloidal chemistry and physiological secretion have a great deal to do with the etiology of the disease.

(c)—That it is probably the terminal event of more than one disease.

Doctor Snyder has well said "At present we are seeing and treating glaucoma as a terminal event." The acute glaucoma case is seen when surgical treatment is necessary to relieve symptoms; at that time it is too late to cure the disease.

Until the etiology of glaucoma is thoroughly understood the treatment will be problematical.

No line of treatment has been uniformly or definitely successful because we do not yet understand the underlying factors causing the disease.

The most important point in the treatment now is the making of an early diagnosis. Doctor Snyder has brought out in his paper this fact, that if the factors in the etiology of this symptom complex could be early recognized and eliminated, the terminal event, glaucoma, would not occur, and the number of cases requiring surgical treatment would be greatly lessened.

Doctor Thomasson of New York has stressed the importance of early diagnosis and insists that the enlargement of the blind spot is the earliest and the most constant sign. He also mentions that the reaction of the pupil to adrenalin is the other dependable early sign.

On reading the literature on glaucoma one is struck by the varying opinions as to the etiology of glaucoma.

Seidel has concluded in favor of the most widely accepted theory that the increased pressure is due to a blocking of the drainage canals of the aqueous, chiefly at the chamber angles; also Seidel believes that glaucoma is a result of the hypersecretion of the aqueous and interference with the drainage into the Canal of Schlemm.

Hamburger's work leads him to a different conclusion that the basis of glaucoma is a relaxation of the vaso-constrictive apparatus with a repletion of the eye ball with blood.

He makes the statement that cases of glaucoma occurring after great emotional stress are evidently of this type. Doctor Snyder has mentioned one of his cases of this type.

One of the cases I examined for a defendant in a suit, occurred in an emotional woman, an actress, undoubtedly with a glaucomatous tendency, who was struck over the head by a falling lamp fixture. The shock and the nervous excitement brought on a glaucoma, which was not recognized and absolute blindness resulted. My testimony was not of particular value to the defendant.

One of my cases came to me greatly excited, saying that she had been told that an operation had become necessary in order to save her sight. The tension was higher than it had ever been and she was a candidate for an acute attack. On being assured that she still had a chance to save her vision without operation and with the use of eserin and dionin she has retained a 6/6 vision in both eyes, retained her fields and carried on her work as a teacher. I mention these two cases as ones in which emotion was the exciting cause.

Magitot believes that the increased pressure is due to an obstruction in the choroidal veins, such as a vascular inflammation.

My last four cases have been due to inflammatory processes. The first two cases occurring in women, one who had the influenza two weeks previously, and the second being in bed in the hospital with bronchopneumonia when the attack was precipitated.

In both of these cases I used amino-glaucosan with good results. The first case developed an acute attack in the right eye and an iridectomy was performed.

In a few days an attack developed in the left eye. This was treated with amino-glaucosan.

In both of these cases the tension has remained normal since.

The third and fourth cases were both secondary to an iridocylitis. In these latter two cases I used Links-glaucosan. I admit the drug was effective in reducing the tension in a very short time, but the pain was unbearable, morphine giving very little relief.

Doctor Snyder has brought out several points in his paper on this serious subject, glaucoma, which are worthy of further consideration.

If he has aroused our interest to the point that we go thoroughly into the history of each case in an effort to discover its etiology and treat the case accordingly, his work will not have been in vain.

CLARENCE KING, M.D., Cincinnati: In connection with an inquiry into the action of various drugs used in the treatment of glaucoma, Thiel has prepared a table which presents a graphic summary of recent studies in glaucoma medication.

	Ciliary Body		Anterior Surface Iris	Schlemm's Canal	Chamber Angle	Uveal Vessels	
	Secretion	Volume				Distention	Permeability
PILOCARPIN	↑	↓	↓	↓	↓	↓	↓
ESERINE	↑	↓	↓	↓	↓	↓	↓
ADRENALIN	|	|	↑	↑	↑	↓	↓
ATROPINE	↓	↑	↑	↑	↑	↑	↑

Arrow upward indicates an influence elevating intraocular tension.

Arrow downward a lowering of intraocular tension.

Pilocarpin and eserine increase secretion. (Seidel). The volume of the ciliary body is, however, decreased. (Hess). The iris surface available for absorption is increased by both. The angle of the chamber and Schlemm's canal is opened up.

In regard to the effect of miotics on the distention of the blood vessels and their permeability the opinions in the literature are divided. Thiel has studied in red free light, with the capillary microscope, the effect of these drugs on the blood vessels in the iris of an albinotic rabbit.

Pilocarpin and eserine dilate the afferent vessels and especially the efferent vessels. With atropine there is a hyperemia in the trunk vessels but a diminished amount of blood in the capillaries. With adrenalin there is a contraction of the trunk vessels and capillaries. It has been difficult to explain the action of eserine and pilocarpin in lowering intraocular tension in cases where the chamber angle is blocked, in cases of hydrophthalmus and aniridia, where there could be no question of promoting outflow through Schlemm's canal. The lowering of the tension in such cases must be due to promoting the circulation, especially by dilatation of the efferent vessels. Adrenalin brings about lowered tension by diminishing the inflow of blood into the eye. Finally, the table makes evident that permeability of the intraocular vessels is a decided factor of the variations in intraocular pressure.

Thiel has worked out a brilliant experiment to show the effect of increased intraocular pressure on permeability. In Thiel's experiment the patient is given two drams of sodium fluorescein by mouth, and the eye is observed in the fluorescent light of the slit lamp. In eyes in which the tension is increased a fluorescent stream of sodium fluorescein is observed passing through the pupil from the posterior to the anterior chamber. In normal eyes it is said that no fluorescein is seen in the anterior chamber. After miotics the appearance of fluorescein in the glaucomatous eye, as indicated by the fluorescence in the ultra violet light of the slit lamp, is retarded or absent. The same effect is produced with adrenalin. With adrenalin the vessels are so contracted that the increased permeability which would be expected from the stimulation of the sympathetic does not take place. As Seidel has proved that miotics promote ciliary secretion one would be inclined to believe that the appearance of fluorescein in the anterior chamber would be hastened by their use. However, this is not the case. The increased secretion of the ciliary body is neutralized by the rapid outflow.

The Efficacy of the Pasteur Treatment

L. W. CHILDS, M.D., Cleveland

SINCE the year of 1902, the Cleveland Health Department has recorded 31 cases of rabies all of which resulted fatally. These deaths have been quite evenly distributed through the years intervening between 1902 and 1927. No deaths were recorded prior to 1902 or subsequent to 1927. Undoubtedly, deaths did occur prior to 1902 which were due to rabies but which were not recognized as such. During this period few physicians had ever seen a case of rabies in the human and not a few even denied its very existence. Consequently, deaths were reported to the Health Department as being due to some obscure nervous disease.

Since 1927, when a dog muzzling law was in operation, no deaths due to rabies have been reported in the City of Cleveland. I have visited ten of the 31 cases that died, or practically one-third of the entire number at some period during their acute illness. To the oft-repeated questions: "Did they suffer terribly?"—"Did they attempt to bark like a dog?" or "Were they afraid of water?" I should answer "No", with some reservations. There is seldom any tendency to injure other persons, much less to bite them. The voice becomes hoarse with a peculiar quality.

In a general way, the symptoms may be grouped into three stages. That of prodromata, the excited stage, and the paralytic. In the first and third stages there is little or no suffering. During the excited stage the spasms of the organs of deglutition and respiration may become very distressing. Morphine, during this stage, is tolerated in enormous doses. Happily the convulsive stage lasts but a few hours and soon terminates in a condition of paralysis which mercifully leads the patient on to death. Some of the cases that I witnessed had previously received the Pasteur treatment. Although the treatment had failed to save the patient from rabies, it did serve to mitigate suffering in the convulsive stage. I have never seen an afflicted person attempt to bite or to injure an attendant. At one time a man came to my office and requested the Pasteur treatment because his wife had bitten him "when she was mad". While the convulsive and the paralytic stages are very short, the prodromal stage or the

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stage of hypersusceptibility of the nerve cells to external stimuli may be relatively long. I have had premonitions of oncoming rabies in children as early as two days preceding the real onset of the disease, occasioned by their unusual shrill outcries during the administration of the treatment. A Sandusky policeman, ill with rabies and who had been bitten very slightly upon his right thumb seven months previously, was brought to me one morning with the hopes that inoculations would save him. This man experienced prodromal symptoms for three days and was quite comfortable. He was taken to a hospital where he died eight hours later.

One day a young man dropped into the Health Department and complained that a strange dog had scratched him very slightly upon his chin some two months previously. When handed a drink of water he experienced a convulsive seizure. He died upon the same day. In the country a ten year old boy was injured very slightly upon his forehead by a stray dog. The parents declared that they saw no evidence of injury save a slight bruise. This boy developed rabies. I am offering these cases as concrete examples of very slight injuries leaving no scar and yet resulted in rabies.

My list of cases to whom I have administered the Pasteur treatment during a span of twenty-four years numbers 3400. Four hundred of these cases were either mere exposure cases or were bitten by animals not definitely known to have been rabid. In all fairness they should be deducted from the total number treated. A fair claim for achievement will then rest upon 3000 cases known to have been bitten by rabid animals. Of the 3000 cases treated, six died of rabies or one in every 500 was unsuccessfully treated. The percentage of fatal cases equals .002.

Four of these fatal cases developed during the course of treatment. Since five weeks must intervene between the commencement of treatment and the date when immunity may be expected to take place the number of flat failures of the Pasteur treatment of 3000 cases numbered but two, or one death to each 1500 cases treated. The percentage of flat failures equals .0006-2/3.

The earliest cases (171 in number) were treated with material secured from the Research Laboratory of the Department of Health, New York City. This material was prepared by the old cord method of Pasteur. At this point a few explanations of terms might be appropriate.

It is important to know the difference between street virus and fixed virus.

Street virus is the virulent nervous tissue as met with in the natural disease. When inoculated into rabbits, subdurally it causes the symptoms of rabies at a variable period of more than fourteen days as a rule.

Fixed virus is modified from the street virus by passing it through a long series of rabbits. In this way its virulence becomes greater for these animals, so that they finally take the disease after a constant "fixed" period of incubation. Since the incubation period can not be reduced below this point the virulence of the virus is said to be fixed. It is the use of this fixed virus, modified and attenuated in several ways that is used in the Pasteur treatment. The Pasteur treatment then may be regarded as a vaccination against rabies and may be likened to the vaccination against smallpox by the use of a smallpox virus passed through a long series of cows.

Thus a fixed virus is in several ways different from a street virus. It is more virulent for rabbits since it causes the disease so much more quickly. At the same time it has to some extent lost virulence for other animals higher in the scale when injected subcutaneously. This is explained by most observers upon the assumption of a toxin which in its passage through rabbits has been increased, and its resistance to the action of inimical body juices however is thought to be reduced, hence the innocuity upon subcutaneous injection.

It is the fear of this hypothetical substance which at present prevents the use of a more potent virus for immunization and has deterred Pasteur institutes from using fresh (unattenuated) fixed virus for the production of immunity.

The methods of preparing vaccine vary widely. However, two general methods are commonly used. The so-called Pasteur method uses the living virus attenuated by drying for varying periods and dilution. Separate portions of the cord are dried for from one to fourteen days. Each portion of the cord is suitably treated, emulsified and constitutes a dose. The treatment begins with the least virulent cord dried for fourteen days and ends with a portion of a cord dried one day.

In the second or so-called Semple method the whole cord and brain are pounded up in a mortar with a one per cent carbolized saline solution, incubated at 37c for twenty-four hours and diluted to make a one per cent brain suspension in a five per cent carbolized saline solution.

This method was developed by Major Semple, a British Army Surgeon, on duty in the Indian service in 1912. It is more convenient, moreover, it is thought to be safer, less expensive and there is less danger in getting the sequence of doses confused. As to its efficacy, I shall say more later. In passing, it is sufficient to state here that the first method employs a living virus and the second a killed or dead virus.

Coming back to our series of cases the first 171 cases covering a period of six years were immunized against rabies by the old cord method of Pasteur. In other words, a fixed virus attenuated by aging and drying was used. During this short series of cases, two unpleasant situations arose. The first of these was a case of treatment paralysis, and the second the death of a little girl from

rabies who had received 21 treatments and who died 13 days after her last injection.

In the Spring of 1908, a rabid dog bit a dozen people in one of Cleveland's downtown districts. All sustained hand bites. Among these injured was a man who was bitten severely upon his right hand. Although I cautioned against the use of alcohol, he continued to imbibe during the course of his treatment. Shortly before the termination of his treatment the patient complained of numbness in one of his legs which later became paralyzed. The rectum and bladder became involved and some difficulty was experienced in swallowing, but notwithstanding this alarming picture, a rapid improvement took place and the symptoms cleared up within a few weeks.

I have always believed that the paralysis observed in this case was due to the repeated injection of a foreign proteid represented by the rabid cord so much in evidence in the old cord method of treatment. In all of my subsequent cases this phenomena has never been repeated since, for the most part, subsequent treatments were given with a better prepared fixed virus.

In the fall of the year of 1908, I..... L..... age, ten years, was bitten upon her right hand by a rabid dog. The wounds were deep and several in number. The child received 21 treatments with a vaccine prepared by the old cord method of Pasteur. Thirteen days after the last treatment the child developed rabies. Nerve tissue was examined for negri bodies but none were found. Rabbits were inoculated and subsequently died of rabies but not until the third group of rabbits were inoculated with nerve tissue from the preceding group was the pathologist able to demonstrate the presence of negri bodies. This case seems to show that fully developed cases of rabies may exist in the human as well as in animals without the demonstrable presence of negri bodies.

This case I have counted as one of my two flat failures. The second one occurred sixteen years later when a boy of seven years, bitten severely and deeply in the palm of his right hand, developed rabies within three weeks of the cessation of the Pasteur treatment. The vaccine was furnished by Dr. James McI. Phillips of happy memory to many of us here assembled. Dr. Phillips supplied me with a live virus and the treatment was continued for about three weeks. Why did these children die after a period of five weeks from the beginning of treatment and at a time when it is conceded that the Pasteur treatment has become effective? There are two quite probable explanations.

a. There are some individuals that cannot be immunized against rabies, just as there are some people that you cannot successfully vaccinate against smallpox. In both instances these individuals are exceedingly rare.
b. The Pasteur treatment will fail to immunize against an excessive amount of implanted virus.

It is to be noted that in neither of these cases were the wounds efficiently cauterized. An excessive amount of virus was implanted deep in the tissues of the hand. An anaesthetic should have been given and the wounds opened up and cauterized with fuming nitric acid. Lacerated nerve endings infected by street virus should have been destroyed by cauterization soon after the injury.

It is to be regretted that in extensive wounds about the hands and face that severe cauterization is not more frequently carried out in the first aid procedures given these patients. Patients severely bitten about the nose and mouth can not be saved by the Pasteur treatment alone. Since street virus travels along nerve routes only, the distance between the site of the injury and the central nervous system is so short that rabies appears before immunization becomes effective.

Three of the six cases that I have lost presented injuries of this severe type. To-wit:

(a) M..... C....., a girl, age 7 years, severely bitten through both lips Aug. 13, 1915. Treatment started Aug. 17th. First symptoms of rabies Sept. 9th, or 23 days later.

(b) G..... T....., adult, bitten Oct. 22nd, 1914. Right cheek and mouth badly torn. Treatment started Oct. 27th, 1914. First symptoms of rabies appeared Nov. 18th, or 22 days later.

(c) E..... R....., a little girl of 5 years, was bitten in the spring of 1924. Both lips and tongue bitten. Two teeth were lost because of bites. Treatment started three hours after the injury. Rabies developed 15 days later.

These three cases are typical of a class of cases that cannot be saved by anti-rabic inoculations. The amount of virus implanted was so great and the nerve paths to the central nervous system so short that rabies develops before immunity can be developed by any known anti-rabic virus. It is just possible that a very early severe cauterization of the wounds might have saved some of these lives, but unhappily such a procedure is not common. Fortunately, however, this severe type of injury is very rare. I have met with but one in each thousand cases treated while with the milder type of face bites, amenable to the Pasteur treatment, I have met with one hundred in each thousand cases treated.

The last fatality in my series occurred in the fall of 1926. A dog proven rabid had bitten eight children. While the bites were severe they were all successfully immunized. The vaccine used was the live virus furnished by Dr. James McI. Phillips. A woman not visibly injured requested the treatment since she had cleaned up some utensils used by the dog. I was completely astonished upon the fifteenth day of the treatment to note that she was developing rabies. I was at first inclined to believe that I had initiated a case of rabies with the live virus that I was using.

That theory seemed impossible since I had used this same virus in about three thousand other cases without any such a result. Upon questioning the patient, however, it was found that five months previously that a stray cat had bitten her right foot. She had thought nothing of the injury at the time since it was slight and had dismissed the event from her mind. Now it is quite possible that a slight bite upon her foot would require an incubation period of five months and that the appearance of rabies at the time that she was undergoing the treatment was merely a coincidence. It is also equally possible that a latent case of rabies was activated by the treatment since she had received about the right number of doses to render such an activation possible. I have never heard of a similar case, but the fear of activating some old latent injury has always persisted with me when called upon to treat a fancied one.

In an experience of many years, numerous problems of minor importance arise; some of these are instructive. A few patients have requested treatment for rat bites. While rats may be afflicted with rabies, yet it is so extremely improbable that in a given case the rat inflicting the injury was rabid that I have seldom given the anti-rabic treatment.

Since the results of experiments with the blood of persons and animals suffering with rabies have been negative, I have never given the anti-rabic treatment to persons whose only exposure was the blood of a rabid animal.

As in the blood the virus seems to be found in the milk of rabid animals with great infrequency and should it appear it would be soon destroyed by the digestive juices of the stomach.

In man the salivary glands are seldom invaded by the virus, yet in one case of injury I gave the treatment.

The saliva of dogs may harbor the virus of rabies for a period of ten days before the appearance of active symptoms. It has been my practice to treat all persons injured within this period.

In the administration of the Pasteur treatment times have undergone a change within the past ten years. Dog muzzling ordinances and dog catchers have nearly caused the disappearance of the stray dog in the streets of Cleveland. During the World War and shortly after, when the whole world was going mad, dogs kept step with their masters in Cleveland, and, as a result, a peak was reached during the years of 1918-19-20 and 1921. During the last decade, however, severe injuries inflicted by rabid animals seem to be the exception. Such a sublime faith in the efficacy of the Pasteur treatment has arisen in the minds of the populace that people are demanding the treatment for slight abrasions only. With the average individual the fear of rabies is so great that he elects the trouble of receiving the treatment in preference to several months of worry.

There is good deal of controversy as to whether the living or dead virus is the better. The merits of each are amply set forth by the agents of the manufacturers of biological products. If the injury is only a slight one, a carbolized or a dead virus is as good as any since the hygienic laboratory, by its inspection, makes all of these products practically uniform. But were there any members of my own family severely bitten, I would use the living virus in treating them.

My reasons for preferring a living virus are these. Clinically, I have watched the development of the anti-rabic treatment from the old cord method and observed the mortality after treatment steadily decrease as the more intensive treatments of living virus was used. I have seen treatment paralysis disappear. I have reason to believe that the immunity secured is more lasting than that secured through the use of the carbolized virus (5% Semple).

My experience has been that the general reaction and depression as well as local reactions are more severe after the large amount of protein is injected with the carbolized virus than occurred after the use of the minute amount of protein which is injected with the living virus.

CONCLUSIONS

Death due to rabies has reached the vanishing point in the City of Cleveland.

Patients with rabies suffer severely only in the convulsive stage which is short.

Negri bodies are not always present in an animal suffering from rabies.

Treatment paralysis is very rare, the writer having had but one case in a series of 3000 treated cases.

Flat failures of the Pasteur treatment are almost nil. Only two occurred in 3000 treated cases.

The Pasteur treatment will not immunize against an excessive amount of implanted virus. Likewise, the treatment fails in severe face bites because of the short period of incubation. Early and severe cauterization under an anaesthetic is recommended in these cases.

There are some reasons for believing that old latent infections with a street virus may become activated by recent inoculations with a live virus.

In anti-rabic inoculations the use of a live virus is preferable because of a lessened mortality after its intensive use as well as a more lasting immunity secured. Moreover, the general and local reactions are less severe than those resulting from the use of carbolized virus.

DISCUSSION

H. L. ROCKWOOD, M.D., Cleveland: We are indeed fortunate in having Dr. Childs present his experience covering such a large series of cases and extending over so long a time on the efficacy of Pasteur treatment in rabies. It should be noted that the results shown by Dr. Childs compare very favorably with the work of L'Institut

Pasteur in Paris, as shown by the ratio of failures to cases treated in their published records.

I am interested in the conservative stand taken by Dr. Childs regarding the use of the killed virus treatment. He has indicated that there are two groups of cases, one requiring intensive treatment and the other, less intensive procedures. The group in which any given case may belong is, I take it, indicated by the severity and location of the wounds inflicted by the rabid animal. Dr. Childs has indicated also that in cases of mild or slight injury the use of killed virus instead of the living virus is permissible. This position taken by Dr. Childs in the light of his long experience seems to me very important and one which should afford some discussion.

We in Ohio have had the advantageous position of having a reliable live virus always available prepared by Dr. Phillips. Some of us, when considering the well known biological difficulties both in the preparation and in the use of living virus, feel extremely particular in regard to its source. When dealing with the killed virus with its production approved by the hygienic laboratory no such diffidence need be felt in its administration, with the possible exception of protein reactions mentioned by Dr. Childs. I would therefore conclude that the use of a potent killed virus is always to be preferred unless the living virus has a high reputation for reliability.

I also conclude that Dr. Childs' position on the use of killed virus is taken on the basis that experience with this virus using the so-called Semple treatment is as yet limited. The New York Department of Health figures, as published, compared approximately 10,000 cases treated with living virus with approximately 5,000 cases treated with the killed virus and showed one-quarter per cent of failures with the living virus as compared with one-tenth per cent of failures among cases treated by the Semple method. Of course the producers take a definitely favorable stand for the use of their products.

While experience with killed virus has been limited, both in duration of time and in the number of users who have reported, one important point has already appeared. This has occurred in the use of the single large dose treatment of killed virus in attempts to immunize dogs against rabies. Both at the Wooster experiment station and elsewhere it has been shown that, while killed rabies virus has been found to be effective in protecting some animals later inoculated with street virus for a period of at least nine months, there are in most of the series reported numerous failures. Such failures are also apparent in cities like Detroit where immunization of dogs has been in effect as a requirement for licensing of these animals. Such failures to protect against street virus of rabies by the killed virus inoculation as used have been acocunted for by statements that street virus may contain strains of rabies against which the immunization treatment has not protected. This sort of alibi is familiar to most of us in connection with many biological products and biological tests. It is of course probable that strains of rabies virus differing markedly in virulence may be present in the street virus of rabies. We are not yet in position to be as emphatic on differing allergic response in rabies as is the case for instance in micro-organisms more adapted to laboratory identification such as the several types of pneumococci.

Already considerable time has elapsed since Major Semple in 1911 evolved the use of killed virus in rabies, but more time is still required to decide fully on the limitations of the Semple form of Pasteur treatment. We must also consider that inoculation with street virus, whether in laboratory experimentation or by the unpleasant traumatism of a rabid animal, very often fails to result in rabies. Control animals not previously immunized, when given street virus at Wooster, failed to develop rabies during the first three months kept under observation before they were killed, in several instances.

Competent authorities state that only about 20 per cent of rabid dog bites result in rabies among those bitten. This is a point which Dr. Childs might have mentioned and which of course, in discussing the efficacy of any type of Pasteur treatment, should be kept in mind. When it is considered that 80 per cent of cases are not likely to develop the disease if left untreated the percentage of failures among treated cases takes on greater importance no matter which kind of virus is employed. With all due allowance, however, and as shown by Dr. Childs' results, the priceless boon to mankind of rabies protection through the contribution of Louis Pasteur cannot be overestimated.

In closing it should be noted that, quite apart from its scientific merits, the efficacy of the Pasteur treatment can be greatly enhanced in rabies by the open treatment of wounds inflicted by rabid animals with free drainage, cleansing first with antiseptic solution, then cauterizing, using for this purpose only strong penetrating chemical agents such as fuming nitric acid or formalin. Free exposure to actinotherapy is also indicated, especially in superficial abrasions. From the important side of prevention and in the light of our present knowledge relating to immunization the adequate enforcement of dog muzzling and quarantine ordinances must be given first place.

NEW BOOKS

The Principles and Practice of Medicine. Designed for the use of practitioners and students of medicine. Originally written by the late Sir William Osler, BT., M.D., F.R.S. Formerly Fellow of the Royal College of Physicians, London; Regius Professor of Medicine, Oxford University; Honorary Professor of Medicine, Johns Hopkins University, Baltimore; Professor of the Institutes of Medicine, McGill University, Montreal, and Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia. Eleventh edition revised by Thomas McCrae, M.D., Fellow of the Royal College of Physicians, London; Professor of Medicine, Jefferson Medical College, Philadelphia; physician to the Jefferson and Pennsylvania Hospitals, Philadelphia; formerly Associate Professor of Medicine, Johns Hopkins University. D. Appleton and Company, New York and London, publishers.

Dietetics and Nutrition. By Maude A. Perry, B.S., formerly Director of Dietetics at the Michael Reese Hospital, Chicago, and at the Montreal General Hospital, Montreal, Canada. The C. V. Mosby Company, St. Louis, publishers.

Medical and Surgical Year-Book, Physicians Hospital of Plattsburgh, 1930, comprising Wednesday afternoon invitation lectures, papers of the cardiac round table, the first Beaumont lecture, collecter papers by the staff. The William H. Miner Foundation, Plattsburgh, N. Y.

The President's Page

A Personal Communication to the Membership from

C. W. WAGGONER, M.D., Toledo

Approach of the end of another calendar year offers an appropriate time for reflections on the days and months that have passed into history and for serious thought and deliberation concerning the future, with its numerous and complicated problems.

It is a great privilege to be a member of the medical profession. There is probably not a physician in Ohio thoroughly imbued with the high ideals and lofty principles of his chosen profession who does not hold to this opinion, and who is not ready and willing at all times to fight for the maintenance of the reputation and traditions of a profession so aptly described by Oliver Wendell Holmes, poet and physician, as "the profession which for more than two thousand years has devoted itself to the pursuit of the best earthly interest of mankind, always assailed from without by such as are ignorant of its infinite perplexities and labors, waging an unequal contest with the hundred-armed monster that walks at noon and sleeps not at night, but toils on, nevertheless, not for itself or for the present moment, but for the race and the future."

We all must recognize, also, that hand in hand with privilege walks responsibility; that but a step behind marches opportunity, and that neither, without the help of the other two, is able to make much progress toward their common goal.

In order to keep its sense of responsibility potent and awake to changing conditions so that it will be better able to take advantage of the opportunities that are certain to present themselves, the medical profession has organized itself into national, state and county groups.

Medical organization has, as I see it, two distinct purposes of equal importance. One is to assist the individual physician to better serve the public and to make him a better physician. The other is to assist him in solving the many complex problems that face him as a member of a liberal profession and arise from his relationship with his fellow citizens.

Endless chapters might be written concerning the accomplishments of organized medicine in Ohio, as represented by the Ohio State Medical Association and its component county medical societies and academies of medicine. Volumes could be penned on the unselfish works that have been performed by the physicians of Ohio, individually and through their local and state organizations, in the interest of the public and for the benefit of the welfare and health of the citizens of Ohio. How organized medicine has encouraged the enactment and enforcement of fair and just medical laws to safeguard the public health and protect the people against imposters and the ignorant; how it has fought to maintain the lofty standards of medical education; how it has led in the promotion of sound and beneficial public health education and been a dominant factor in the prevention and cure of diseases, thus prolonging and adding comfort to life; how it has endeavored to keep the practice of medicine free from false, impractical, destructive, dangerous and costly social and economic theories that would react against the public, all would make stimulating and refreshing reading.

However, the purpose of this message to the membership of the State Association is not to reiterate the many splendid deeds that the physicians of Ohio have done in the interests of their fellowmen, but to call to the attention of the members of the medical profession some of the distinct benefits they have derived themselves by and through their membership in their county medical society and state medical association.

In any democratic organization, such as ours, the primary responsibility for achievement of definite programs and steady growth rests upon the shoulders of the membership in general. In other words, if I may be forgiven for paraphrasing two commonplace and trite expressions, the centralized organization of any group of individuals is only as strong as its weakest local organization and every member of any organization benefits from it in proportion to the amount of interest he maintains in it.

What organized medicine has been able to accomplish in Ohio in the past, either in the interest of the public or the medical profession itself, is a credit to the untiring, unselfish, loyal and conscientious interest and efforts on the part of many members of the State Association in all parts of the state. On the other hand, more perhaps could have been achieved had those members who have shown a passive spirit toward medical organization taken a more active part in the activities of their county medical society and the State Association, and joined their colleagues in contributing to the good work that has been done.

Summarizing a few of the many benefits that the individual physician derives from member-

ship in organized medicine is not an easy task, but the following brief discussion of several of the more important angles of this general question may be of some stimulation to those who may be inclined to regard membership in the Ohio State Medical Association as something of only minor importance. Let us hope that will be the case, at any rate.

In the first place, membership in organized medicine is an assurance of the physician's standing in his community, before the public, the law and the profession. The public more and more is beginning to understand and appreciate the real purposes of organized medicine and is looking to the county medical society and the state organization for guidance in matters of public policy on medical and health questions. Therefore it is not far-fetched to assume that individual patients are curious and anxious to know the status of their family physician or the specialist summoned to serve them before they establish contractual relationships with them. Membership in organized medicine is one of the best recommendations for any physician to possess. Unfortunately a few so privileged have conducted themselves in such a manner that they reflect discredit on the profession as a whole, but this is true of any group under the sun and happily such instances are few and far between.

Secondly, membership in organized medicine provides the means for cooperation and active participation with other local, statewide and national organizations and groups interested in common problems of public health and professional practice. Every physician, if he cares anything at all about the principles and traditions of his profession, is deeply interested in public health questions. Each physician does his daily bit in furthering progress in this great field. However, united and concerted thought and action by organized groups of physicians are necessary for the guidance of the public in public health matters and for stimulating sound and effective public health programs. Through medical organization the physician is able to officially express his views on matters pertaining to the health and welfare of the people; to encourage programs that he believes to be beneficial and discourage those that he thinks detrimental to the public—in fact to retain a leadership in those activities that need the wise and conservative guidance of the medical profession.

In the third place, membership in organized medicine provides a means for contact between the medical profession and numerous local, state and federal executive, judicial and legislative departments of government. It is highly important and vital that these various branches of government be kept fully informed as to the concerted medical viewpoint on various matters that may come before them, in order that they may administer their respective duties not only in the best interest of the public health but also with all fairness to the medical profession, individually and collectively.

Next, publication of the *Ohio State Medical Journal* and the bulletins of some of the county societies and academies of medicine is made possible by medical organization. *The Ohio State Medical Journal*, which has no peer in its respective field, constitutes a consecutive record of scientific, economic, social, legal and legislative developments of direct interest to every practitioner. It is a clearing house for the scientific achievements of members of the Ohio medical profession. It serves as a medium for keeping the members of the State Association informed on social, economic, legal and governmental matters affecting scientific medicine and public health. Through its news departments it helps physicians to keep in touch with their colleagues in all sections of the state; through its editorial columns it reviews and analyzes the fundamental policies of organized medicine on innumerable questions and keeps the profession advised about the activities of the enemies of scientific medicine and of those working to destroy the high standards and lofty principles of the medical profession.

Membership in organized medicine makes it possible for the medical profession to combat with united ranks those schemes which would commercialize medical practice; such as medical service methods of mass production in industry; such as would make the individual physician a hired servant of the state; such as would extend governmental interference with the practice of medicine, and such as would disrupt the whole system of individual, competitive medical practice by the instillation of socialistic and communistic theories that have been proven harmful and dangerous to the public welfare. This unanimity of protective effort on the part of the medical profession also provides physicians with an adequate weapon for preventing radicalism and quackery within its own ranks and for aiding public officials in efforts to minimize illegal practice of the healing art by the ignorant, cultists and imposters.

Every member of the State Association must readily acknowledge that one of the most important services performed by it for its membership is the maintenance of a medical defense plan by which unwarranted malpractice suits against physicians are minimized and prevented in many instances and through which the physician unjustly and falsely charged with malpractice is given the material and moral support of the organized profession in his defense of his reputation and professional standing. The record of the Medical Defense Committee speaks for itself and its advice and suggestions published from time to time in *The Journal* should be studied intently by every member of the State Association.

One thing especially should be kept in mind, namely: *Only those physicians of Ohio who are in continuous good standing as members of their county medical society and State Association are eligible to the benefits offered by the medical defense plan.*

Membership in organized medicine makes possible the carrying on of state committee activities and the maintenance of a state headquarters office with its various service bureaus and departments for the benefit of all the members; the establishment of this central clearing house of valuable information and the organization of various services for the members are extremely vital factors in the state-wide organization.

Last, but not least, membership in organized medicine enables the individual physician to maintain contact with that great body of physicians throughout the United States through membership in the American Medical Association and to have a personal responsibility in that organization's effort to promote the interests of the organized physicians of the nation.

It seems to me that the actual advantages in store for the member of organized medicine are so obvious and so indispensable to the practitioner in this age of social and economic unrest that none eligible to membership can afford to pass up the opportunity to continue himself in good standing or join his colleagues in their united efforts to advance the causes of scientific medicine, protect public health and guard jealously the time-honored principles and traditions of the greatest of professions.

Welfare and Relief Programs and Their Probable Tendencies

Social economists have for some time been considerably puzzled and in no small measure worried over the growing demands being made by the public upon official and non-official relief-dispensing agencies.

Recent social surveys reveal that in 1925 representative relief and social welfare agencies spent more than three times as much for relief as in 1916 and that this increase continued throughout the more prosperous period from 1925 to 1929.

Testimony of the medical profession would undoubtedly add much more interesting data to the present compilation as it is well known that medical charity has increased by leaps and bounds during the past two decades and is continuing to grow.

Writing in *The Survey*, Linton B. Swift raises some interesting questions and makes some pertinent suggestions regarding the relationship between the community chest movement and public relief.

"What is likely to happen if the public is allowed to continue its assumption that we can 'meet all relief needs' during the coming winter, which will probably offer the most severe test we have ever had?", Mr. Swift asks.

"In seeking a way out," he continues, "we must first realize that the long-continued increase in relief expenditures is due largely to conditions for which neither social case work nor relief is ultimately a remedy. Relief as a tool of treatment is most effective in personal maladjustments which would make it difficult for the individual to maintain himself socially even in the most favorable environment. This area of relief need is relatively stable.

"The second area of relief need consists primarily of social, economic and industrial conditions which are subject to rapid change. To see the futility of an attempt on the part of voluntary agencies to meet all relief needs in this area, we have only to realize that it includes ultimately all that portion of the population whose income is insufficient to provide a 'decent' standard of living. We have no accurate estimate of the size of this group. We only know that in large communities the number of those on marginal or submarginal incomes is so vast, and affected by so many factors, that it would be impossible to make up the income shortages through relief giving. Yet that is the area toward which our generalized and unrestricted relief responsibility is inevitably spreading with a sort of centrifugal force. * * *

"Just as we have learned that in problems of personal maladjustment, relief can be used effectively only as a tool of treatment, so must we learn that in its community aspect relief only increases social and economic evils unless it is used merely as a tool of remedial social action. It must consciously be made a part of a social program designed to remove the causes and the need for relief, a lesson which society has not yet learned. This difference between the case work aspects and the social aspects of relief should lead us to question whether, though we may not fear the use of relief in case work with the individual, we are not actually pauperizing community resourcefulness through stimulating reliance upon relief in meeting social and economic problems. * * *

"And finally, I wonder whether in making use of the wholesale appeal for relief, we have not been merely fostering a community relief psychology which has already gone beyond our control, is 'spilling over' into pressure for development of public agencies and into community demands for new types of govermental relief? And may not all of this gradually result in a great governmental relief system of the type which has wrecked states in the past; a system all the more dangerous because it is not consistently planned as part of a remedial program, but created category by category?"

Annual Meeting Plans, Constitutional Questions, Medical Economics Problems and Numerous Other Important Subjects Before Council at October Meeting.

COUNCIL MINUTES

The Council of the Ohio State Medical Association met in the headquarters office, Columbus, at 1:00 P. M., on Sunday, October 5, 1930.

The officers and councilors present were: Drs. Waggoner, Houser, Freiberg, Caldwell, Huston, Klotz, Slosser, Cummer, Stevenson, Shanley, Brush, Seiler, Goodman; Dr. Alcorn, Chairman, and Dr. Upham, a member of the Policy Committee; Dr. Hein, Chairman of the Committee on Periodic Health Examinations, and President of the Toledo Academy of Medicine; and Executive Secretary Martin and Assistant Executive Secretary Nelson.

The minutes of the Council meeting of July 13, 1930, (published on pages 687 to 690, inclusive, of the August, 1930, issue of *The Journal*) were read and on motion seconded and carried, were approved.

ANNUAL MEETING PLANS

Pursuant to the action of the Council at its last meeting in authorizing the President to appoint a special Council committee on Annual Meeting Facilities to investigate and report back to the Council the facilities available in Akron, Dr. Cummer, Chairman of the Committee, presented the following written report:

REPORT

To the Council of the Ohio State Medical Assn:

The undersigned special Council Committee on Annual Meeting Facilities, appointed at the Council meeting on July 13, 1930, (see Council minutes, page 688 of the August, 1930, issue of *The Journal*) held a meeting in Akron on Sunday, August 10, 1930, which was attended by each member of this committee, as well as by Dr. Stevenson, local Councilor; Dr. Chas. C. Pinkerton, President-Elect, and Dr. A. S. McCormick, Secretary of the Summit County Medical Society; Dr. C. R. Steinke, Dr. H. S. Davidson, and Mr. M. E. Woolley, Manager of the Mayflower Hotel, which is under course of construction in Akron.

That conference lasted for several hours, during which this committee considered in detail blueprints of the Mayflower Hotel. The committee also visited and surveyed the meeting places in the O'Neil Department Store, and the Akron Armory. The committee also visited and observed the meeting places in the A. Polsky Department Store and in the new Y.M.C.A. building now in the course of construction.

Detailed minutes of the conference in Akron on August 10th, were transmitted to each of those who had been in attendance.

This Council committee held another meeting in the headquarters of the State Association in Columbus on Sunday, September 7, and reviewed in detail the documents, correspondence and other information which had been submitted to it and which had been assembled by the committee.

Having in mind the expressed will of the House of Delegates that the 1931 Annual Meeting be held in Akron, if possible, this committee is, of course, reluctant to recommend a change in the meeting place, but on account of the great uncertainty that the Mayflower Hotel will be completed and in effective operation to care for a capacity convention by the second week in May, 1931, (which hotel has been recommended by the local committee as the convention headquarters), this committee reports to the Council its recommendations that another city be selected by the Council for the 1931 Annual Meeting.

In making this report, this committee reminds the Council of the hospitable and generous spirit of the Akron profession in its desire to entertain the next Annual Meeting and expresses regret at the necessity of making this unanimous report.

C. L. CUMMER, *Chairman.*
E. R. BRUSH.
E. B. SHANLEY.

Upon motion by Dr. Freiberg, seconded by Dr. Klotz and carried, the foregoing committee report was adopted.

1931 ANNUAL MEETING IN TOLEDO

Based on the action of Council in adopting the report of the Special Committee on Annual Meeting Facilities, President Waggoner called attention to the necessity of action by the Council at this time in determining the meeting place for the 1931 Annual Meeting. He introduced Dr. Hein, President of the Toledo Academy of Medicine, who submitted in writing an invitation from the Academy of Medicine of Toledo and Lucas County for the 1931 Annual Meeting to be held in that city. This invitation was officially signed by himself, as President of the Academy of Medicine, and by Dr. Murphy, Chairman of the Council of the Academy of Medicine. Dr. Hein supplemented the official written invitation verbally.

Members of Council inquired specifically from Dr. Hein and Dr. Waggoner as to the available facilities for the Annual Meeting in Toledo. These were outlined in detail and it was pointed out that practically all of the meetings could be held in one hotel, and that another hotel immediately across the street would be available for the one or two other sessions.

On motion by Dr. Seiler, seconded by Dr. Caldwell and carried, the Council accepted the invitation from the Academy of Medicine of Toledo and Lucas County and thereby decided to hold the 1931 Annual Meeting in that city on Tuesday and Wednesday, May 12 and 13, the dates previously set by the Council at its July 13th meeting.

Dr. Upham called attention to the fact that the Board of Trustees of the A. M. A. had under consideration the second week in May, 1931, for the annual meeting of the A. M. A., in Philadelphia. The Council instructed the Secretary to communicate with Dr. West, the Secretary of the

A. M. A., relative to this matter and to point out that the 1931 annual meeting dates for the Ohio State Medical Association had been set several months ago for the second week in May, in accordance with the usual date during recent years, and to urge that some other dates be decided for the annual meeting of the A. M. A., if possible.

Upon motion by Dr. Cummer, seconded by Dr. Stevenson and carried, the Council decided that if it is necessary to change the dates for the 1931 Annual Meeting of the Ohio State Medical Association to avoid a conflict in dates of the annual meeting of the A. M. A., the second week in May, 1931, that the dates for the annual meeting of this Association be set for Tuesday and Wednesday, April 28 and 29, 1931; otherwise the dates already set of Tuesday and Wednesday, May 12 and 13, 1931, are to be retained.

In accordance with the constitutional requirement for a Council Committee on Arrangements for the annual meeting, Dr. Waggoner, the President appointed as such committee, under the provision of Chapter VIII, Section 6, of the By-Laws, the following Council Committee: Dr. Slosser, Chairman, Dr. Cummer and Dr. Stevenson.

ANNUAL MEETING PROGRAM

Dr. Houser, Chairman of the Council Program Committee, reported in detail on the action of his committee at its meeting on the morning of this date and submitted for the consideration of the Council, a number of suggested out-of-state speakers for general sessions, some of which had been suggested to the committee in reply to requests from officers of the scientific sections. He also reported the action of the Program Committee in retaining the general scientific session on Wednesday afternoon of the annual meeting for the scientific orations by two out-of-state speakers. He reported that the committee expected to secure two other out-of-state speakers for the Wednesday evening general session, one on a scientific subject, and the other on a subject of medical economics.

Dr. Slosser and Dr. Goodman, the other members of the Program Committee, also made suggestions and reports and requested members of Council for additional suggestions. The committee reported its desire to provide scientific motion pictures for Wednesday afternoon, preceding the general session and during the time the House of Delegates is in session. Upon motion by Dr. Stevenson, seconded by Dr. Freiberg and carried, the Program Committee was authorized to proceed as suggested by the committee. It was the sentiment of Council that any films to be secured should be of a thoroughly scientific nature.

PERIODIC HEALTH EXAMINATION

Dr. Hein, Chairman of the State Association special committee on Periodic Health Examinations, was introduced and summarized the action of that committee at a meeting on the morning of this day. He requested suggestions from members of Council for procedure and activity by his committee. He also requested the councilors, in their contact with the county societies in their respective districts, to urge that at least one meeting be held by each society in the next few months devoted to the subject of periodic health examinations and thorough routine procedure, and that if possible, such meeting include a demonstration of such examination. Several members of Council also pointed out the importance of periodic health examinations and of creating additional interest among the members in being prepared to render such service to their patients.

CONSTITUTIONAL CONFORMITY

Dr. Freiberg, Chairman of the Committee on Constitutional Conformity, reported progress by his committee in contact with the component county medical societies in securing amendments and revisions by the county societies in conformity to the recently revised Constitution and By-Laws of the State Association, and based on the suggested model constitution for component societies prepared by his committee and transmitted to the officers of the academies and county societies. He explained further plans of his committee and efforts to secure as prompt action as possible by the various societies. He pointed out the importance of the councilors emphasizing this matter in their contact with the societies in their respective districts.

PROBLEMS OF NON-RESIDENT MEMBERSHIP

President Waggoner reported on problems that had arisen recently in connection with non-resident memberships in some of the academies of medicine. The constitutional requirements were discussed and various members of Council illustrated the problem by incidences in their districts. Dr. Freiberg, the Chairman of the Council Committee on Constitutional Conformity, pointed out that no physician should be entitled to membership in any county society or academy, under any classification, unless and until he has been a member in the county society of his residence, and of necessity, a member of the State Association. Provisions of the Constitution in relation to transfers of membership were also discussed and analyzed.

QUESTIONS OF PROFESSIONAL ADVERTISING

The President called attention to a number of incidences of newspaper advertising by physicians. He related the recent action of the Toledo Academy of Medicine on this question. He also called attention to the activity of some of the newspapers in various cities soliciting physicians for various types of personal and group advertising. This question was discussed from various angles at considerable length by several members of Council. Attention was called to the provisions

of the Principles of Ethics of the A. M. A. On motion by Dr. Caldwell, seconded by Dr. Cummer and carried, the President was requested to appoint a special committee of Council to consider the various angles of this general problem of professional advertising and publicity and to report to the Council at a later meeting.

Pursuant to the adoption of the above motion, Dr. Waggoner, the President, appointed the following Council committee: Dr. Caldwell, Chairman, Dr. Brush, Dr. Cummer, Dr. Goodman and Dr. Houser.

MEDICAL RESERVE OFFICERS

There was submitted for the consideration of the Council at the request of the Minnesota State Medical Association, a resolution pertaining to Army regulations which require that medical reserve officers shall, during each five year commission period, put in two hundred hours military work in camp, correspondence school, inactive training, meetings or similar military activity, or become ineligible for renewal of commission with assignment to an organized reserve unit and revert to the auxiliary reserve in time of peace. Following discussion and comment, on motion by Dr. Freiberg, seconded by Dr. Houser and carried, this question and this resolution were referred to the special Military Committee of this Association for information and recommendations.

FEDERAL MEDICINAL LIQUOR REGULATIONS

There was submitted to the Council considerable recent correspondence pertaining to proposed changes in federal regulations on the prescribing and dispensing of medicinal liquor. The President called special attention to the news article on this subject in the October issue of *The Journal*, pages 866 and 867.

MALPRACTICE SUITS

A brief report was submitted on the increase in the number of suits and threats of suits for alleged malpractice against physicians. The various causes for such suits were discussed by members of Council. Special attention was called to a discussion of this subject in the bulletin to the secretaries of the component county medical societies and academies, through the headquarters office, under date of September 29, 1930. Members of Council were requested to emphasize the suggestions contained in that bulletin in their contacts with the county societies in their respective districts.

MEDICAL ECONOMICS QUESTIONS

Dr. Waggoner reported in detail on a series of conferences and committee meetings held in Columbus on Wednesday, October 1. He related the conference on the morning of that date by the Medical Economics Committee and the Sub-Committee on Workmen's Compensation in relation to Resolution D, adopted by the House of Delegates at the last annual meeting (page 527 of the June, 1930, issue of *The Journal*). He outlined the legal provisions whereby industries which are self-insurers may designate the physicians to render service to their injured employees. He pointed out, however, that there were only about 260 self-insuring industries in Ohio, as compared with over 40,000 industries participating direct in the state's workmen's compensation fund. He analyzed the legal provisions and the administrative policy of the Industrial Commission in maintaining as nearly as possible the free choice by injured workmen of their own physicians in workmen's compensation cases coming directly under the state fund.

The President also reported on joint conferences by the Medical Economics Committee and the Sub-Committee on Workmen's Compensation, with the Policy Committee, in a consideration of numerous suggested proposals by various groups on amendments to the Workmen's Compensation Law. Policies on this question, included in the last annual report of the Medical Economics Committee (pages 377, 378 and 379 of the May, 1929, issue of *The Journal*) were referred to as being the attitude and general policy of the State Association on these matters, through approval of that report by the House of Delegates.

Problems of laboratory practice and services rendered by the State Department of Health Laboratory were also reported upon, including the joint conference of the Medical Economics Committee and a committee from the Ohio Society of Clinical and Laboratory Diagnosis, followed by a conference by this latter committee with officials of the State Department of Health.

The President also reported on the dinner meeting on October 1, attended by the Medical Economics Committee, the Sub-Committee on Workmen's Compensation, and the Policy Committee, and at which officials of the State Industrial Commission and of the State Department of Industrial Relations were present as guests of the State Association. The problems discussed at that conference were reported upon, as well as the fine spirit of cooperation and mutual understanding.

POLICY AND LEGISLATION

Dr. Alcorn, Chairman of the Policy Committee, summarized the recent activities of his committee and additional plans preparatory to the next session of the Ohio General Assembly. He referred to problems and suggested activities in recent bulletins issued by his committee, through the headquarters office to the legislative committeemen in each of the county societies and academies of medicine. He related the prospects for a number of new members in the Legislature and reported on the involved taxation program, probable public health legislation, legislation on embalming, funeral directing, pharmacy, auto-

mobile drivers license, proposed liens to hospitals and the collection of fees for services rendered to those injured in automobile accidents, revision and recodification of the probate code and criminal code, additional proposed legislation on expert testimony, numerous proposals affecting workmen's compensation, proposed legislation on social insurance, welfare, poor relief, court psychiatrists, change in the set-up of county government, eugenics, and numerous other prospective legislative measures, including cults and other groups opposed to health measures for the protection of the public.

MEMBERSHIP

A report on the membership tabulation in the State Association to date shows 5451 members for 1930, as compared with 5472 on the same date last year, and as compared with 5528 at the end of 1929. Emphasis was placed on the desirability of securing the reaffiliation of all eligible delinquent members and of securing as new members, those physicians who are eligible and should be affiliated.

MISCELLANEOUS

A report was submitted on a complicated municipal hospital situation in Fostoria. The various angles of this question were discussed.

In the case of Dr. Leech, of Lima, a copy of a formal communication to him from Dr. Olin West, Secretary of the A. M. A., under date of July 29, 1930, was read.

Attention was called to the program and dates for the annual Ohio Welfare Conference in Toledo, October 7 to 10. Upon the request of Council, Dr. Waggoner agreed to assign either an official representative or an unofficial observer to attend that conference and to report back to the Council.

The Council adjourned to meet on the call of the President at a date to be determined by him, either about the middle of December, or the first Sunday in January.

S. J. GOODMAN, M.D.,
Secretary of Council.

Instances of Failure in Law Enforcement a Menace to the Public

In a recent issue of the *Cincinnati Enquirer*, there appeared the following news item, which undoubtedly will be of interest to the medical profession of Ohio, as well as other thoughtful citizens who are concerned about the apparent trend toward a complete collapse of the law enforcement machinery of the state and nation:

"Eight chiropractors, convicted for practicing without obtaining a license from the State Medical Board, were fined $25 and costs, suspended, by Municipal Judge Thomas J. Elliott, yesterday. The court granted them a 30-days stay of execution to appeal and released them on bond of $1.00 each, the smallest bond ever fixed in any case in the history of the court. In suspending the fines Judge Elliott said that he was not in sympathy with a law which tends to deprive people of any treatment they desire."

Such an attitude assumed by a public servant, chosen by the people to dispense justice impartially and to play a key part in the administration of the laws and in law enforcement, is thought-provoking to say the least.

It has undoubtedly been the impression of the majority of the citizens of Ohio that it was the province of a judge to enforce the law and the province of legislative bodies to make them. Analysis of the Cincinnati case would seem to indicate that the fundamental function of a court of justice has been misunderstood and misconstrued.

Also, the statement attributed to the Cincinnati jurist is of unusual interest in view of the fact that the Ohio Supreme Court, a few years ago in rendering a decision in a similar case, in effect held that the laws of Ohio governing those practicing the healing arts were fair and impartial, were quite necessary and should be enforced to protect the public from quackery, charlatanism, the mistakes of ignorance and the schemes of those who would prostitute their profession to a profiteering basis.

Surprising as it may seem, the Cincinnati jurist apparently has not a very clear conception of the Medical Practice Act of Ohio, or of his sworn duty as a judge.

The Ohio statutes governing the practice of the healing arts do not, either actually or by implication, deprive the people of any treatment they desire. The choice of treatment is fundamentally a matter for individuals to decide.

What the law does provide, however, is that those who practice the healing arts shall be qualified and competent to treat the sick and injured and that they shall prove their ability to do so through examinations given by a board composed of those competent and prepared to pass on the qualifications of those applying for licenses to practice.

That such a law is in every detail in the best interests of the public is the opinion of Ohio's highest tribunal and of others who have seriously considered its provisions.

Decisions like those handed down in the Cincinnati cases are unfortunate and menace the safeguards that have been devised to protect the health and welfare of the public.

Similar tactics on the part of other courts are a matter of record and in their aggregate have a tendency to make a joke out of the law enforcement machinery established by the commonwealth for the protection of its citizens.

Important Conference on Workmen's Compensation Clarifies Many Questions on Administration and Answers Many Complaints.

Many questions relative to the handling and reporting of medical and surgical cases compensable under the Ohio Workmen's Compensation Law and mutual problems of the medical profession and the State Industrial Commission arising from administration of the compensation law were discussed at a dinner meeting of the Medical Economics Committee of the Ohio State Medical Association, its sub-committee on Workmen's Compensation, the Policy Committee of the State Association, members of the State Industrial Commission, its department heads and officials of the State Department of Industrial Relations, held on October 1, in Columbus.

The desirability for a continuance of the mutual spirit of cooperation and friendly relationship that exists between members of the State Industrial Commission, its various divisions, and the medical profession of Ohio generally was the keynote of the conference.

Practically all those who took part in the discussion voiced the opinion that in many ways the Ohio Compensation Law is superior to the compensation laws of other states and that in general it is more satisfactory to all groups and individuals affected by it.

Dr. C. W. Waggoner, Toledo, president of the Ohio State Medical Association; Dr. J. Craig Bowman, Upper Sandusky, chairman of the Medical Economics Committee, and Dr. Geo. Edw. Follansbee, Cleveland, a member of that committee, expressed to the members of the Commission and its department heads, the appreciation of the medical profession for the fair, friendly and cooperative attitude of the Commission and its department chiefs in their contacts with thousands of physicians throughout the state and voiced the opinion that the great majority of the doctors of Ohio were anxious and ready to continue to cooperate with the Commission in its efforts to efficiently and fairly administer the provisions of the Compensation Law.

Wellington T. Leonard, chairman of the Commission, congratulated the physicians of Ohio on the spirit which they have manifest in their dealings with the Commission and voiced the hope that misunderstandings between the Commission and the medical profession might be minimized, if not eliminated.

"The doctors of Ohio are in the happiest position of any doctors of any state in the Union having a workmen's compensation law," declared Mr. Leonard. "In many states medical and surgical services given after 60 days from the date of injury are not compensable and in some states there is a 30 days' limitation. In those states physicians who render medical and surgical services in lingering injury cases have no assurance whatsoever they will be compensated for services rendered. In a great many states the free choice of physicians is greatly restricted and in some states no free choice of physicians is permitted at all.

"After attending a recent conference of members of compensation and accident boards and commisisons of all the states, I am firmly convinced that the Ohio Workmen's Compensation Law is the closest to perfection and deals more fairly with the injured man, the employer, the physician and all others involved than any compensation law now on the statute books. A continuance of the fine cooperation that exists between all groups interested in this humanitarian program and law will go far toward keeping Ohio in the lead", Mr. Leonard said.

Mr. Leonard reviewed briefly the multiple activities of the Commission, pointing out that the last annual report of the department showed that 242,912 claims had been filed by injured workmen during a 12-months period; that 179,335 of these were for medical expenses only; that $11,491,-907.58 had been dispensed during 1929 by the Commission to injured employes or their beneficiaries; that medical fees paid during that period had totaled, $3,682,181.47 and that fees totaling $1,433,332.33 had been paid out to hospitals and nurses. He also explained the reasons for the maintenance of a reserve fund approximating $47,000,000, stating that this was necessary to meet payments over a period of years to employes permanently or partially disabled, as losses must be paid out of premiums collected during the period in which the accident occurred and not charged to future premiums.

Additional interesting information relative to the administration of the compensation law was given by Will T. Blake, director of the Department of Industrial Relations; Thomas M. Gregory and L. E. Nysewander, both members of the State Industrial Commission.

Mr. Gregory touched on several points that were of special interest to the medical profession.

Expressing the belief that it is impossible for any legislative or administrative set-up to produce the perfect specimen on all occasions and that the merits of such endeavors must be judged by what is accomplished for the greatest number of persons in the majority of cases, Mr. Gregory added:

"The responsibility of the medical profession in seeing that the Workmen's Compensation Law is justly administered and that the injured work-

ers of the state receive what is coming to them is most important. The Commission in arriving at its decisions depends greatly on the honesty, judgment, accuracy and professional knowledge of physicians. Unless physicians make honest reports, injured workers will be paid too much or too little. Unless physicians make accurate and complete reports, the Commission is handicapped in its investigations. Unless physicians make thorough examinations and give skillful treatment, injured workers may suffer."

Mr. Gregory stressed the necessity and importance of complete and thorough examinations by physicians of all types of accident cases, pointing out that a number of cases which are now costing the state thousands of dollars in compensation and medical fees were considered trivial injuries at the time of the mishap.

"Prompt and careful first-aid treatment should be rendered in even the most casual or minor accident," he declared. "We have evidence in our files showing that a goodly number of cases of prolonged disability and even permanent disability are the result of carelessness in minimizing the danger of minor cuts and scratches, or the result of lack of proper caution on the part of the physician or inefficiency in rendering adequate treatment at the time of injury. The State Industrial Commisison believes that the injured workers of Ohio should have the best medical and surgical attention possible. We depend on the physicians of Ohio to give this and are anxious that they are promptly compensated for services rendered."

Mr. Gregory analyzed briefly the Anderson Law (explained in detail in the July, 1929, issue of *The Ohio State Medical Journal*, page 571) enacted at the last session of the General Assembly, which provides stringent penalties for persons convicted of presenting fraudulent claims or reports to the State Industrial Commission. Fines ranging from $200 to $1000 and imprisonment from six months to a year, or both, are provided for in this statute and may be imposed against any physician found guilty of submitting a fraudulent fee bill to the Commission or falsifying reports to aid a claimant in a compensation case, Mr. Gregory pointed out.

In this connection, it was pointed out that records of the Commission reveal several cases where the attending physician has made himself liable to prosecution under the Anderson Law through the signing of fraudulent claims for injury or certification of inaccurate data.

The record of one of these cases shows that a physician certified to an alleged operation for hernia, submitted a bill for the operation and was paid by the Commission which later learned, following examinations by other physicians, that such an operation had never been performed.

A number of cases are on record at the Commission where claims were submitted, signed by the employe and the attending physiican, where injuries were sustained "outside" employment and therefore were not compensable under the Workmen's Compensation Law. The law and the regulations of the Commission do not consider compensable any injuries incurred in going to and returning from work unless transportation facilities are furnished by the employer and unless such injured employe was, at the time, under the control of or carrying out the instructions of the employer.

Records of the Commission also show several instances where a physician has submitted a fee bill for services to patients who were never seen by him but where all the medical attention was rendered by a nurse or technician employed in the physician's office. Under the regulations of the Commission payment out of the state insurance fund for medical and surgical services may not be authorized unless the services were rendered or performed by one duly licensed to practice medicine and surgery. A physician signing a medical report for an injured claimant not personally attended by him or submitting a fee bill for services not actually rendered by him may be prosecuted for fraud under the fraud section of the Workmen's Compensation Law.

An insight into other complex problems faced by the Commission was given by Ross Hedges, Assistant Director of Industrial Relations and chief of the Division of Workmen's Compensation.

Mr. Hedges said that while he realized the administrative machinery of the department was not perfect, he did feel that much had been done to correct and iron out many of the questions that have arisen, especially those involving the physicians of the state.

He related some of the difficulties that have arisen relative to prompt settlement of the C-3 (medical-only) claims and analyzed some of the complaints made by individual physicians regarding the handling of this class of claims.

"For some time, there have been many justifiable complaints from physicians relative to our procedure in the handling of medical-only claims," Mr. Hedges declared. "We had never made a practice of notifying physicians of the file number assigned to a medical-only case. The physician did not receive notification of the number of such a claim until he received his check for services rendered. As a result, whenever a case was held up and delayed for investigation or on some technicality, the physician found himself quite at sea as what had happened to the case; was unable to give the number of the case in inquiries addressed to the Commission, and was in the dark as to when, if ever, he would be paid.

"Following discussions of this question with the Medical Economics Committee and the headquarters office of the State Medical Association, and acting upon their suggestions, the department has devised a new method of handling

medical only cases which should go far toward minimizing delays and should keep physicians advised at all times as to the status of cases in which they are interested.

"In the future when a C-3 claim is held up for investigation or diverted for some reason from the regular office routine, the physician will be notified and given the number of the claim to which he can refer in future correspondence with the department. Notifications and numbers will not be sent out in C-3 claims that are approved and that are not delayed in the regular office routine. The large majority of C-3 claims are cleared at the office within a week after they are filed and we are making a strenuous effort to maintain this schedule so that the physician will receive his check within a week or 10 days after the claim reaches us", he said.

Mr. Hedges declared that the department was unwilling to take the blame for some of the complaints made by physicians, resulting largely from carelessness, inaccuracy or unbusiness-like office procedure on the part of the doctor.

"Poor bookkeeping on the part of some physicians or their secretaries often creates unnecessary work for the department and unjust criticism of the Commission," he said. "Not infrequently we receive a letter from some physician asking why he has not been paid in certain cases—some of the letters are accompanied by lists of claims running as high as 50 and 75. Of course the department checks all the claims so listed and in the majority of cases—I will not say all of them—but in the majority of cases we find that the physician has been paid, has received his check from the Commission and has cashed it. To investigate complaints of this kind consumes the time of some member of the department who might have been utilizing his or her time investigating justifiable complaints or attending to his or her regular office duties.

"Naturally, once in a while payment in some case has been overlooked or delayed unnecessarily for too great a time. We are always glad to receive complaints of this kind and always make a special effort to straighten the matter out as soon as possible. Before sending in complaints of this kind, however, the physician should be absolutely certain that he has not already been paid and make sure that he is not guilty of slipshod bookkeeping in his own office.

"Another class of complaints that are largely due to the doctor's negligence are those received from injured workmen, asking why they have not received compensation for injuries received many weeks or months ago. In checking these kicks, we find that in some instances the physician has never filed certain reports necessary in adjudication of the case or that he has ignored the request of the Commission for more data or information on certain medical angles of the case.

"These are typical examples of some of the problems we face. For the most part, we have very little difficulty with the medical profession. The majority of doctors are doing splendid work and complying in every way with the rules and regulations laid down by the Commission. A little more cooperation and consideration by the few who are a bit troublesome will aid in producing greater efficiency in the office routine."

Mr. Hedges also sounded a note of warning to the medical profession generally not to be taken in by the various so-called "Industrial Service Bureaus" operating in the state and soliciting members of the medical profession and others for business, promising to collect bills before the State Industrial Commission on a commission basis. These agencies have no standing of advantage before the Commission and can do no more than the physician himself in hastening the payment of bills.

"Several of these agencies," said Mr. Hedges, "are merely using the doctor as a wedge to get at the Commission's files so that they may obtain the name of some claimant and data on his case in the hope of selling their service to him at an exorbitant commission.

"The Commission is always ready and willing to answer any queries on any case before it. Strong-arm methods by collection or "service" bureaus will have no effect whatsoever on the Commission. Claims and medical fees are paid as promptly as possible after final decisions are reached and the efforts of outside agencies will add nothing to the speed of our present procedure.

"The Commission prefers to deal with the physician himself or with him through the headquarters office of the Ohio State Medical Association with which the Commission is glad to cooperate in reviewing of claims for members of the State Association. The service rendered by your Association headquarters office meets with the entire approval of the department."

Mr. Hedges, in conclusion, called attention to the attitude of the Commission relative to fees for expert medical testimony in contested or complicated cases. He said that while there is no set fee schedule for services of this kind rendered by physicians, the Commission is aware of the value of such testimony and the inconvenience often sustained by the physician subpoened, and that it is willing to pay reasonable and adequate fees for such service. He said that such fees paid in recent months have ranged from $5 up to $50.

How physicians handling industrial accident cases can assist the medical department of the State Industrial Commission in speeding up settlement of claims and arriving at accurate decisions on complicated injury cases was summarized by Dr. H. H. Dorr, chief of the medical department of the Commission.

Dr. Dorr emphasized the confidence of his department in the integrity and ability of the ma-

jority of the physicians of the state but pointed out how often the medical department finds itself up in the air because physicians send in conflicting reports, inaccurate data or insufficient information.

"We are dependent almost entirely on what the doctor says about a case", Dr. Dorr declared. "If we get conflicting reports, what are we to do? If we get inaccurate or insufficient data, we must start further investigations, causing unnecessary delay."

"Once in a while we get some outlandish or ridiculous statement on a medical report. This necessitates additional correspondence or a special investigation. We can't take the risk of saying the physician is wrong in any case for I have any number of cases on file in which the medical analysis sounds unbelievable, but upon searching investigation has been found to be accurate and authentic.

"The medical department tries to give every doctor a square deal and it asks and expects the same in return from the private practitioner. We do not adhere blindly to the medical and surgical fee schedule. Additional fees are allowed in unusual and complicated cases or cases requiring long and special treatment. However, we can not be expected to have any sympathy or consideration for the physician who pads his fee bill, charges for services he never rendered and endeavors to gouge the department."

Dr. Dorr brought out many points on how the physician can aid in speeding up payments and assist the medical department. These are summarized in part as follows:

1. Submit medical and surgical reports and fees bills promptly.
2. Make all reports accurate and complete.
3. Adhere strictly to the fee schedule unless special or unusual service is rendered, in which instance a statement of explanation should accompany the fee bill.
4. *X*-ray films or prints should be sent to the department in all cases requiring a picture; these should carry the claim number (if possible), name of claimant, date of *X*-ray examination, and name of roentgenologist, and should be accompanied with an interpretation.
5. Names and addresses should be signed legibly.
6. Refer to the case number whenever possible.
7. When seeking information about claims, use a separate sheet of paper for each claim.
8. Make complete and thorough examination of injured person no matter how trivial the injury may seem.
9. Keep accurate and complete case histories.
10. Keep accurate bookkeeping system, thereby eliminating appeals to Commission for information on claims already paid.
11. Study and understand all the rules and regulations of the Commission.

December Dates Set for Medical Board Examinations

Dates for the annual winter medical and surgical examinations given by the State Medical Board were set as December 2, 3 and 4 at the October meeting of the Board held in Columbus.

Following transaction of routine business, the Board heard and approved a resolution submitted by a committee composed of Dr. H. M. Platter, Dr. J. F. Wuist and Dr. J. H. J. Upham on the death of Dr. John K. Scudder, Cincinnati, a member of the Board. The resolution was as follows:

"In the recent death of John K. Scudder the medical profession of the State of Ohio has suffered a great loss and a sense of deep personal bereavement.

"As the executive officer of the Eclectical Medical College of Cincinnati he conducted that institution with the highest ideals for the basic instruction of the students in preparation for their chosen profession.

"As a member of the State Medical Board he constantly strove for the protection of the public and the elevation of the standards of the medical profession.

"As an expert in medical education his knowledge and advice were ever at the service of the Board. Untiring and unsparing of himself, he gave valuable service during his long terms of membership and endeared himself to all of his fellow members.

"As a man he was an upright God-fearing member of his community.

"Therefore, Be it Resolved by the Ohio State Medical Board in regular session, October 7th, 1930, that in the death of Dr. John K. Scudder the Board has lost one of its most valuable members; the members of the Board have lost a dear friend, and the medical profession has suffered the loss of an upright and eminent member, one who ever had its interest and ideals near to his heart.

"Therefore, Be it Resolved that the Ohio State Medical Board extend its deep and sincere sympathy to the family of the late Dr. John K. Scudder, and cause a copy of these resolutions to be inscribed in the minutes of the Board."

Colleges and universities are not required under state law to have a registered pharmacist in charge of their pharmacy laboratory storerooms, Attorney General Bettman has advised the Ohio State Board of Pharmacy. He also held that the laboratory storekeeper is not required to label and register all poisons which he delivers to students for laboratory work.

New appointees to the recently created State Bureau of Examination and Classification under the State Department of Public Welfare are George R. Mursell, instructor in general psychology, Ohio State University, and R. P. Rauch, psychologist in the clinic of the State Bureau of Juvenile Research.

Dr. Milford E. Barnes, formerly health commissioner and head of the training station for health workers in Greenville, Darke County, has accepted the chair of preventive medicine and hygiene at Iowa State University.

Annual Conference of Ohio Health Commissioners and Sanitarians in Columbus, November 18 to 21

Eleventh Annual Conference of Ohio health commissioners with the State Department of Health and the Sixth Annual Meeting of the Ohio Society of Sanitarians will be held Tuesday, Wednesday, Thursday and Friday, November 18, 19, 20 and 21, in Columbus.

All sessions of the joint conference will be held at the Neil House except the general sessions Wednesday afternoon, November 19, which will be held at Pomerene Hall and the State Department of Health Laboratories, on the Ohio State University campus.

Registration of delegates and visitors will open at 9 a. m., Tuesday, November 18, at the Neil House, and at 11 a. m. the first general session will be held in the Main Ballroom when the annual address of the Director of Health, Dr. Charles A. Neal, will be delivered.

The general session Tuesday afternoon starting at 2 o'clock, will be presided over by Dr. R. H. Markwith, health commissioner of Summit County. Two addresses of interest have been programed for this session, one by Miss Anita Jones, R. N. assistant director of the Maternity Center Association, New York City, on "Maternity Hygiene," and another by Dr. W. J. Smith, medical inspector of the State Department of Health, on "Report on Survey of Tourists' Lodging Houses in Rural Districts." The latter subject will be discussed by Charles S. Slade, sanitary engineer, State Department of Health.

The Wednesday morning general session opening at 9 o'clock, will be presided over by Dr. Edward Blair, health commissioner of Warren County, and the following papers will be presented:

"The Value of Milk and Some of the Problems of Quality Milk Production", by C. L. Blackman, dairy production extension service, Ohio State University, and "The Results of Milk Survey in Ohio", by C. E. Smith, D.V.M., milk specialist, U. S. Public Health Service, Washington, D. C.

Following a general discussion of these subjects, Dr. I. C. Riggin, executive secretary of the New York Heart Clinic, New York City, will address the conference.

At noon, the delegates and visitors will be taken to Pomerene Hall, Ohio State University, for a luncheon presided over by Director of Health Neal. Following addresses by W. W. Charters, director of the Bureau of Educational Research, Ohio State University, and President George W. Rightmire, of Ohio State University, delegates and visitors will be taken on an inspection tour of the State Department of Health Laboratories and be given a demonstration in "Laboratory Technique" by Leo F. Ey, director of the laboratories.

Dr. O. D. Tatje, health commissioner of Portsmouth, will serve as chairman of the Thursday morning joint session of health commissioners and sanitary engineers. At this session, F. H. Waring, chief of the Division of Sanitary Engineering, State Department of Health, will speak on "The Presentation of a Suggested Standard Form of Regulations for District Boards of Health, Governing the Installation and Operation of Public Swimming Pools". The subject also will be discussed by Dr. P. B. Wiltberger, health commissioner of Franklin County; E. B. Buchanan, director of laboratories, Cleveland Department of Health, and J. S. Shuey, chief sanitary inspector, Cincinnati Department of Health.

The Thursday morning session will be closed with a talk on "Dental Hygiene", by L. G. Bean, D.D.S., chief of the Bureau of Dental Hygiene, State Department of Health.

On Thursday afternoon the annual meeting of the Ohio Society of Sanitarians will open with Dr. E. R. Hiatt, Troy, president, in the chair. Following the reports of the officers and committees, the nominating and resolutions committees will be appointed to draw up reports to be presented at the final session of the society, Friday morning.

Three addresses have been scheduled for the Thursday morning session: "The Role of the Teacher in Preventing Sickness", Dr. R. D. Worden, health commissioner of Portage County; "Results of Appraisal Survey of Local Public Health Nursing Services", Mrs. Zoe McCaleb, chief of the Division of Public Health Nursing, State Department of Health, and one of general interest, by J. P. Mooney, member of the Ohio General Assembly, House of Representatives, from Hocking County.

Mrs. McCaleb's presentation will be discussed by Harriet Seaman, R. N., Putnam County; Dr. H. H. Pansing, health commissioner of Montgomery County, and Dr. J. F. Elder, health commissioner of Mahoning County.

A banquet and dance will conclude the Thursday program. The chief address at the banquet will be by Dean Stanley, Lebanon, president of the Warren County Bar Association, who will talk on "Legal Aspects of Public Health".

The Ohio Society of Sanitarians will convene again on Friday morning with Dr. J. J. Sutter, Lima, presiding. Following the election of officers for the ensuing year and the transaction of new business, Dr. H. J. Powell, health commissioner of Wood County and Bowling Green, will speak on "Medical Science the Greatest Factor in Civilization", and Leo. F. Ey, director of the State Department of Health Laboratories, will

deliver a paper on "Report of Continued Studies of One Hundred Cases of Undulant Rever". Dr. Walter N. Simpson, director of laboratories, Miami Valley Hospital, Dayton, will discuss Mr. Ey's report.

James F. Bauman, assistant director, State Department of Health, will be chairman of the closing session of the conference, starting at 2 p. m. Friday. Following a talk by Dr. N. Sifritt, health commissioner of Marion and Marion County, on "Milk Sickness", and discussions of this subject by Mr. Ey and Dr. Finley Van Orsdall, chief of the Division of Communicable Diseases, State Department of Health, a general forum for the discussion of various public health questions will be held.

One of the features of this year's conference will be a Maternity Institute to be held on Wednesday and Thursday for the special benefit of the Public Health Nurses' Section. The institute will be in charge of Miss Jones, who is scheduled to address the Tuesday afternoon general session, and will consist of general discussions on maternity problems, the part the nurse plays in maternity care, the value of prenatal care, a review of delivery and post-partum care and demonstrations and exhibits of equipment for care of the mother and baby.

Bureau Standards Suggest a Measure for X-ray "Doses"

Standardization of *X*-ray treatments may result from the invention and development at the U. S. Bureau of Standards of an apparatus for standardizing the method of measuring *X*-ray "doses", it was stated recently by the *X*-ray Section of the Bureau.

The announcement of the Bureau, which may be of interest to Ohio physicians engaged in the use of the *X*-ray for the treatment of diseases and injuries, was as follows:

In giving *X*-ray treatments for cancer, it is very necessary to carefully control the *X*-ray "dose" given the patient, just as the doctor must carefully regulate the amount of a drug that he administers. This is particularly important where it is necessary to give the greatest possible "dose" of *X*-rays, for, should the "dose" be too great, burns or more serious injuries might result.

Likewise, it is necessary for the doctors to use some standard "dose" so that it may be easily duplicated in all parts of the country and all over the world in order that their treatments may be reproduced and repeated. At present many doctors use small portable measuring instruments called dosage meters, and it is necessary that these be accurately calibrated.

The instrument developed by an associate physicist in the *X*-ray Section of the Bureau of Standards, Lauriston S. Taylor, enables the accurate measurement of *X*-ray intensity. The method of measurement consists essentially in allowing an *X*-ray beam to pass between two metal plates, one of which is connected to a high voltage battery and the other to a sensitive measuring instrument capable of measuring a current of one-one-hundred-billionth of an ampere. The *X*-rays cause the air between the plates to conduct electricity so that a very small electric current flows through this air and is measured by the sensitive meter. This small current of electricity is proportional to the intensity of the *X*-rays. Thus an accurate knowledge of the *X*-ray "dose" may be obtained by measuring this electric current.

Having thus established a standard, the dosage meters used by all doctors can be calibrated at the Bureau of Standards in the accepted unit. In 1927 the standard unit of *X*-ray intensity in the United States was compared with the European units by an indirect method which has since developed to be unsatisfactory. Consequently, at present there is no assurance that the standard unit in the United States is in agreement with the standards in England and Germany.

This new instrument developed by Mr. Taylor permits of a direct method of comparing the United States unit with foreign units and is much more satisfactory than the apparatus used in the old indirect method. The new apparatus has been greatly reduced in size, weighing only about 20 pounds as against the old instrument which was over 200 pounds. The new type of standard ionization chamber eliminates most of the difficulties encountered in foreign chambers, and possess new fine points in measurements.

The portability of this instrument makes possible direct comparison between the American standard and those in Europe. In the Spring of 1931, Mr. Taylor plans to take the entire new equipment, which is portable, to the standardization laboratories in England, Germany, France and possibly Russia and Italy, where direct comparisons can be made. Until the development of this new ionization chamber, such a thing has been impossible. Being able to take this apparatus over to Europe to make direct comparisons with their standards is one of the salient points in its favor.

At present, the *X*-ray measurements are standardized in only a very few hospitals in the United States. The instrument developed at the Bureau of Standards is a means whereby the *X*-ray work in all hospitals can be standardized, and as a result greatly increase the value of *X*-ray treatments.

At the next International Congress of Radiology, to be held at Paris, France, in July, 1931, Mr. Taylor will make a report on the results of this standardization between the different *X*-ray laboratories of the world.

More About Collecting Agencies and Schemes for Getting Money from Doctors

The persistence of certain collection agencies and adjustment companies operating in Ohio to capitalize on the present unstable condition of business, with its extension of credit and increase in delinquent accounts, has become a nightmare for the professional and businessmen throughout the state.

Physicians, especially, are being besieged by representatives of collection and adjustment bureaus for the placement of old and delinquent accounts for collection or adjustment.

The condition of business generally and the alluring promises made by these bill collectors place the physician in a difficult position. He is anxious to settle long overdue accounts he finds on his books, and, on the other hand, he has learned through his own experiences, or the experiences of his colleagues, that some of the adjustment firms now soliciting him for business are not to be trusted and are in that business wholly for their own gain at the expense of the physician.

The article published in the October, 1930, issue of *The Ohio State Medical Journal*, explaining some of the tricky methods used by some collection agencies to defraud physicians, has caused considerable comment among members of the State Association and has brought forth new revelations of some of the schemes being worked in Ohio by unscrupulous and fly-by-night adjustment bureaus.

One physician residing in the northern part of the state was recently visited by an agent representing an out-of-state adjustment company and peddling a proposition to collect from patients by personal contact, by obtaining a note made out to the company. As soon as the note was signed, the physician was to receive 75 per cent of its face value. According to the physician, no contract was presented or discussed. The agent made notations of a number of delinquent accounts that the doctor had on his books after which he presented to the physician a sheet of yellow paper on which were words to the effect that the physician had turned over to the agent so many accounts for collection.

In about a week, several patients called at the physician's office and told him that they were receiving very pertinent letters. He immediately wrote to the company's headquarters about the matter and was informed that he had signed a regular contract. This the physician immediately denied by letter, informing the company if a contract existed it was a forgery. Further investigation by counsel for the physician resulted in the mailing by the company of a contract to a bank in the physician's home city for the inspection of himself and his attorney.

The contract was one of the usual tricky, misleading type and to the bottom of it had been pasted the yellow sheet of paper which the physician had signed in the presence of the agent, making it appear as a bonafide contract.

The company has refused to return to the physician the accounts placed with its agent for collection and has threatened to sue the physician for payment of all the accounts on the grounds of breach of contract.

A somewhat similar experience of another member of the State Association residing in Eastern Ohio is also a good example of how some of the unscrupulous collection bureaus operate.

This physician was visited about the noon hour by an agent of an out-of-state agency. An appointment was made for later in the day. Before the appointed hour, the agent returned to the physician's office, and in the absence of the doctor, informed his office secretary that the doctor had given him permission to look over his list of delinquent accounts. Not knowing that such permission had not been granted, the secretary allowed the agent to go over the doctor's books and he left with a sizeable list of unpaid accounts.

When informed of the situation, the physician immediately telegraphed to the company's offices, informing them of what had occurred and telling them that he did not wish them to handle any accounts for him. Since he had signed no contract, the physician forgot about the matter until several days later when some of his patients began receiving letters from the collection agency.

A registered letter to the company ordering them to stop sending letters to his patients was never answered. Later the physician went to the offices of the company personally and demanded to see on what authority they were collecting his accounts.

He was shown a contract, supposedly signed by him, but which was a rank forgery.

A few days after his return home, the physician made some investigations among his patients and found that many of them had cancelled checks which they had paid the company supposedly in payment of their accounts. These amounted to almost $500. After several letters demanding the return of his accounts and even offering to split the $500 which the company had fraudulently collected, of which he had never received one cent, had gone unanswered, the doctor *received a bill from the company for $829.00 for collection and special legal services.*

Of course, there are some collection agencies operating in the state that are quite reputable and dependable. These firms are well known and

have established headquarters in charge of some person with whom the people of the community are well acquainted.

On the other hand, there are other agencies that are supposed to be branches of national organizations; whose representatives are total strangers, and who have no established offices, merely doing business where they happen to hang up their coat and hat. Agencies belonging to this class are the ones to be avoided by physicians, or at least carefully investigated before the placement of accounts with them.

Several Ohio physicians who have been in practice many years and who have had varied experiences with all kinds of collection services have volunteered some splendid advice in recent weeks concerning collection agencies generally.

The two principal points emphasized by these veterans might be summarized as follows:

Collection agencies that are reputable and efficient, and are desirous of giving the physicians honest and above-board service, usually do not require the physician to sign a contract, but merely undertake the collection of delinquent accounts on the basis of a verbal agreement or understanding.

Physicians, whenever possible, should do business only with those collection agencies that are well-known locally, have local headquarters and are managed by local persons; or with collection and credit services operated by local trade, mercantile or professional organizations or associations.

It is pointed out that most desirable collection agencies do not make a practice of requiring the physician to sign a wordy and complicated contract which is usually hazy even to one of legal training. These reputable firms are most always willing to rely on the physician's word or on a very informal agreement.

The desirability of dealing with a local collection firm whose reputation is well established and whose representative is someone favorably known in the community is obvious.

If, however, physicians are unable to employ local talent to help them collect overdue accounts and find it necessary to engage agencies from other cities, they should always make a point of thoroughly investigating the status of the agency selected; avoid placing their signature to any contract—at least to one that they do not understand or have not studied carefully— and learn something, if possible, about the reputation and standing of the representative soliciting their business.

Radio Quackery May Someday Cease

Members of the medical profession and public health workers who are familiar with the abuse of the radio by venders of worthless and harmful remedies and by medical and health quacks of all description may find a ray of hope that a nation-wide clean-up is around the corner in the prediction made by Federal Radio Commissioner Ira E. Robinson that a "revolution" of the American public against the "overdose of advertising on the radio" is coming unless broadcasters mend their ways.

Judge Robinson supports the recent statement of Dr. Lee De Forest, president of the Institute of Radio Engineers, that government regulation, and possibly government censorship, is certain to come unless the tendency to utilize the radio for ruthless, blatant and misleading advertising is curbed.

Health authorities as well as members of the medical profession and organized medicine have vigorously protested—often in vain—the use of the radio by quacks and imposters. It is encouraging to learn that those influential in the radio field and in a position to bring about a change of tactics on the part of many broadcasting stations have at last awakened to the menace and evils which the medical profession has on frequent occasions emphasized.

Ohio Members Honored

Two Ohio physicians, prominent and active in organized medicine, were recently honored by the Board of Trustees of the American Medical Association through appointment to two of the important national committees of the A. M. A.

Dr. E. J. Emerick, Columbus, a member of the Mental Hygiene Committee of the Ohio State Medical Association and until recently director of the Ohio Bureau of Juvenile Research, was named a member of the A. M. A. Committee to Study Problems of Mental Hygiene, authorized by the House of Delegates at the last annual A. M. A. meeting. Other members of this committee are: Dr. H. Douglas Singer, Chicago, chairman; Dr. Walter L. Treadway, Washington, D. C., Dr. J. Allen Jackson, Danville, Pa., and Dr. F. G. Ebaugh, Denver.

Dr. J. H. J. Upham, Columbus, a member of the Board of Trustees of the A. M. A., dean of the College of Medicine, Ohio State University and for many years a member and chairman of the Policy Committee of the Ohio State Medical Association, was appointed a member of the Board's Committee on Legislative Activities. Other members of this committee, appointed at the request of the House of Delegates to act as an advisory body in matters of national legislation, are: Dr. Thomas Cullen, Baltimore, Dr. D. Chester Brown, Danbury, Conn., Dr. C. B. Wright, Minneapolis, and Dr. E. H. Cary, Dallas, Texas.

At the last meeting of the Board of Trustees, Dr. Upham discussed some of the important questions that arose during the 98th annual meeting of the British Medical Association, held at Winnipeg, Canada, August 25-29, at which he was an official representative of the Board of the A. M. A.

Economic Problems of Pharmacy in Relation to Medicine as Reflected in Druggist Committee Report

Two of the most closely allied professions in existence are undoubtedly those of medicine and pharmacy.

Each is dependent to some degree on the other and each has problems that have a distinct effect on the relationship which exists between the two professions. Some of the problems are mutual and can be solved only through cooperation of members of both professions.

Efforts being made by the medical profession to solve some of its economic questions are of considerable importance to druggists and are being studied with the keenest of interest. The same is true from the standpoint of the medical profession which has been following closely attempts being made by organized pharmacy to meet some of the economic problems of that profession.

Some of the problems confronting the Ohio pharmacist today and how he is endeavoring to solve them are outlined in a report made recently to the Ohio State Pharmaceutical Association by its Committee on Trade Interests.

Part of this report, submitted by A. L. Flandermeyer, chairman of the committee and published in *The Ohio Druggist*, reads as follows:

"We perhaps are all interested in trying to solve the future to find what it holds in store for us. The sign pharmacy as we see it along the highways and byways today is to a great extent a misnomer and for what reason. Many of our prominent pharmacists are complaining about the lack of actual pharmaceutical work in their stores, so let us try and analyze the situation. One reason might be the great increase in the number of drug stores since the great war. Reason number two, the number of clinics being established by physicians. Reason number three, the hospitalization of the patient as soon as apparently ill enough to need medical attention. Reason number four, the centralization of physicians and dentists in the newly constructed medical buildings. Reason number five, the increase of dispensing physicians in all communities.

"None of the above reasons would perhaps show a decrease in the total number of prescriptions written by physicians as a whole. The increase in the number of drug stores no doubt divides the amount of pharmaceutical work per store. While the number of clinics being established centralizes this work in one place as most up to date clinics have their own dispensing laboratory and naturally do the majority of this pharmaceutical work. Hospitalization has the same effect and if they are not equipped for dispensing, the pharmacy located nearest to the hospital makes a bid for the business. The centralization of the physician and dentist in the medical buildings might be considered the greatest evil from the view point of our average drug store, not taking the dispensing physician into consideration, for from him we can expect little or nothing under present conditions.

"The increase in the number of drug stores has perhaps caused the physician to be somewhat more concerned as to who may and may not compound his prescription. He is beginning to look into the qualifications and equipment of the pharmacist to whom he sends his work. This is especially true of physicians in centrally located offices whether in medical buildings or others. Prescription pharmacies, operated as such, at, or near these centers are receiving the majority of the business of these physicians and dentists, not only compounding their prescriptions but also supplying them their office needs.

"As we are situated today it is a foregone conclusion that we cannot all be actual and successful prescription pharmacists or conduct a store successfully where the majority of the work performed would be pharmaceutical.

"One way perhaps would be the separation of the drug store and the pharmacy. The pharmacists banding together and opening prescription pharmacies and centralizing as the physicians are doing. The other and perhaps more logical way is higher education and higher requirements for pharmacy. This ultimately would have the desired effect in reducing the number of drug stores and creating pharmacies where graduates can practice their profession.

"We cannot expect to keep on a level with the other professions unless we raise our standards, just as medicine, law and dentistry are doing today. Increasing population will nearly always take care of the normal output of professional men and by the same token demand better trained men whether this be pharmacy or the others.

"Pharmacists as a body can and should cooperate with physicians and dentists as a body in order to increase prescription writing through U. S. P. and N. F. propaganda. Let us show the physician that we are still able and competent to compound their medicines just as well as the pharmaceutical houses, upon whom the great majority of medical men are depending for their medicines today.

"There is no better opportunity for the young graduate who is qualified and ambitious than to become interested in this work for the betterment of our profession.

"The future of ethical pharmacy is assured just as the future of medicine, dentistry or law,

but naturally there will always be those who for lack of ambition, some for want of opportunity and a few others capitulating to the lure of merchandising who will fall by the wayside.

"It is mighty fine to have both the professional and the commercial training for conducting the drug store of today, a few succeed in both, but as a general rule the professional has not had the training necessary to conduct a merchandising business successfully and have neglected the professional end, is an easy victim to commercial failure.

"Pharmacies where commercialism is practiced to any extent do not appeal to the physician as a proper place for the pharmaceutical service which he might expect and as a general rule he patronizes the store which has the more professional appearance and where the owner and clerks devote more of their time to pharmaceutical practice. I might cite as an example the fact that physicians use the medicines prepared by pharmaceutical houses because the men engaged in the manufacture of these preparations do nothing else and must be qualified to a high degree of proficiency.

"With the progress being made today toward reviving professional pharmacy without much effort being put forth by organized pharmacy I am sure in five or ten years we will have a different story to tell, but we can hurry this change considerably by lending a little effort."

Medicinal Liquor Regulation Stands

No change in the federal regulations permitting the purchase of six quarts of medicinal whisky annually by physicians for administration to their patients is contemplated at the present time, according to a statement issued to the press by Congressman Britten of Illinois, following receipt of a letter to that effect from Assistant Attorney General G. A. Youngquist.

As stated in the October, 1930, issue of *The Journal*, page 866, it had been suggested to the Treasurer and Justice Departments that in the new regulations governing medicinal liquor now being formulated, physicians be permitted to withdraw but one quart of medicinal whisky for office use every sixty days and that a complete application be required for each quart withdrawn.

Congressman Britten was among those who filed protests against this proposed regulation, pointing out the additional burden which would be imposed on physicians by the provision which likewise would have no appreciable beneficial effect on enforcement methods.

The letter received by Mr. Britten from Assistent Attorney General Youngquist on the question stated:

"I acknowledge receipt of your letter of October 3 with reference to protests you have received regarding proposed changes in the regulations with respect to the purchase of whisky by physicians for administration to their patients.

"The suggestion that one quart be allowed every 60 days was contained in a tentative draft of the proposed legislation prepared some time ago and submitted to the various bodies interested, including the American Medical Association, for comment and suggestion. The matter has since been discussed with officers of the American Medical Association and it has been decided to retain the present regulation which permits the single purchase of six quarts of whisky annually."

Commenting on the decision to retain the present regulation concerning permits for medicinal whisky, Congressman Britten said:

"The proposed legislation would have required the issuance of millions of applications and subsequent permits as well as the mailing, carriage and delivery of them. It would have made necessary the employment of a large additional office force, including stenographers and file clerks.

"It would have cost the Treasury a lot of money and would have been a constant annoyance to reputable physicians everywhere and would not have prevented the issuance of a single quart of whisky.

"I am glad the prohibition unit as now constructed is working with the American Medical Association instead of against it. The physician, himself, is best qualified to know the needs of his practice.

"The Department of Justice by sane regulation and a recognition of the imperfections of man, can do much good for the cause of temperance, if not for prohibition."

New Ohio Physicians Through Reciprocity

Reciprocity licenses to practice medicine and surgery in Ohio have been granted to the following by the State Medical Board: Peter Leo Boyle, Youngstown, Jefferson Medical College; Isadore R. Cohn, Toledo, Syracuse University; Aaron I. Grollman, Cincinnati, University of Maryland; Milton B. Kay, Cleveland, University of Pennsylvania; Martha Moore, Oxford University of Indiana; George L. Sackett, New Philadelphia, Tulane University; Ray D. Saul, Steubenville, Medico-Chirurgical College; John L. Scarnecchia, Youngstown, Georgetown University; Russell L. Haden, Cleveland, Johns Hopkins University; Dean H. Harris, Ashtabula, Eclectic Medical College; Robert E. Maderer, Toledo, University of Buffalo; Joseph T. Thomas, Jr., Sandusky, Meharry Medical College; Walter S. Curtis, Youngstown, Harvard Medical School; Irwin Clay Hanger, Cleveland, Johns Hopkins University, and Neal J. Marquis, Cleveland, Loyola University.

Pertinent Figures on Adequate Supply of Nurses are Announced by National Committee on Grading of Nursing Schools

On a typical day in a period of heavy sickness load, only two per cent of those patients who needed a special or private duty nurse were unable to get one, it was revealed by the answers of 4,000 physicians to questionnaires sent out by the National Committee on the Grading of Nursing Schools.

This case check-up by physicians substantially agrees with evidence collected from other sources, such as registries, that there is at the present time no shortage in the general supply of nurses, and that the supply is approaching the saturation point as far as actual, economic demand is concerned.

Informal comments from doctors corroborated statistical findings that, while it is sometimes hard to get a nurse for Sundays, out-of-town cases, or twenty-four hour duty, it is almost never impossible to find a special nurse.

The physicians questioned represent those who minister to the most heavily nursed portions of the community, in cities and towns of all sizes. The months studied were January and March, two peak months of illness. It was found that, on the day of his answer, the typical physician had three patients who needed special nurses and two who got them. But of all the patients who, in the estimation of the attending doctor, needed a nurse, only two in each 100 were unable to find one.

Of the patients who did not have the special nurse recommended as necessary, it was found that: 45% could not afford a nurse; 29% were cared for by relatives or friends; 13% did not want a nurse; 75% were cared for a visiting nurse.

Only 6% of these patients, or 2% of the total number, wanted a nurse but could not find one.

These findings are especially interesting from the standpoint of actual economic demand and willingness to pay for nursing service on the part of patients. More than 500 patients, for example, did not want a nurse and did not engage one, though, in the opinions of their physicians, they needed her skilled nursing care.

In the period of a month, the typical physicians in this group had five patients who employed nurses. They estimated that, given adequate floor service in the hospital, two of the five would not have needed "specials". Twenty-six per cent of the physicians felt that some of their patients could have been cared for by a visiting nurse or hourly service, and 27 per cent felt the services of relatives or competent servants would have been adequate.

Since the physicians reporting were a selected group, caring for the most heavily nursed members of the community, it would seem, from the foregoing facts, that for the profession as a whole the daily average of patients per physician actually needing skilled nursing care is much less than three.

Half the physicians in this heavily nursed group declared that every one of their patients who needed private duty nurses had them. There is, therefore, reason to believe, the study states, that the lack of a nurse is often due not to a shortage, either in the general or local supply, but to the patient's decision that he did not want or could not afford a nurse.

Since, in the opinion of the doctors, two of every five patients employing special nurses could have been cared for by the floor service of a well-run hospital, the increase of adequacy of such floor service would mean a decrease in the employment of "specials" and additional employment of full-time graduates in the hospitals instead.

Many hospitals are already studying the problem of increasing the supply of graduate nurses on their staff so as to lessen the cost of nursing care for the patient and yet add little additional expense to the hospital's budget.

Seventy-three per cent, or almost three-fourths, of the physicians said they feel it is harder for their patients to pay the nurse's fee than to obtain her services. Those in the North Central and Western states were more emphatic on this point. Paying the fee is slightly less of a problem in the larger cities than in the smaller ones.

Of 23,500 physicians who answered questions as to the general need for private duty nurses in their practice, 87 per cent of the general practitioners said they need them often; 5 per cent, occasionally; and 8 per cent, practically never.

The specialists, who make up two-fifths of the total number reporting, showed somewhat less demand for the special nurse, with 79 per cent requiring them frequently for their cases and 17 per cent practically never. The private duty nurse is most in demand by the surgeon and obstetrician, 98 and 94 per cent, respectively, saying they often need her for their patients. The percentage of need in the other specialties were:

Internal medicine, 89%; Orthopedic surgery, 86%; Pediatrics, 85%; Urology, 85%; Ophthalmology, 75% Neurology, 57%; Tuberculosis, 47%; Industrial medicine, 47%; Dermatology, 33%; Roentgenology, 25%; Public health, 9%.

Though physicians sometimes have to call two or three registries to get nurses for certain types of cases, their comments show much more fre-

quently an inability to get the kind of nurse they feel is particularly needed for the case, rather than a total unavailability of nurses.

About two calls per physician were refused during a one-month period. The doctors find that nurses are most apt to turn down calls for twenty-four hour duty, night duty, cases in the home, Sunday or holiday cases, and those requiring the nurse to go out of town.

In fifty-two per cent of cases, the source of supply for nurses was the hospital registries; 21 per cent of the physicians got nurses through their own lists; 17 per cent, through the central registries; 5 per cent, from the commercial registries; and 5 per cent from unspecified sources.

Not unnaturally, the physician finds the nurse he gets from his own private list the most satisfactory. Nine out of ten of all the physicians said they would like to have the nurse on their last case back again.

Efforts of Osteopaths to Gain Special Hospital Privileges Are Denied

Renewed efforts on the part of osteopaths and limited practitioners to gain staff appointments and the permission to treat patients in publicly owned and operated hospitals have been reported in a number of Ohio cities and counties within recent months.

The tactics and demands of those unqualified to treat all kinds of sickness and injury have not only placed hospital officials in an embarrassing position but they have also disrupted to no small degree the splendid, humanitarian public service being rendered by these institutions.

Several hospitals that have recently launched campaigns for additional funds with which to carry on during the coming year have found a portion of the public unreceptive to their solicitation because of the insidious propaganda circulated by those seeking privileges to which they are not entitled.

It is the responsibility and obligation of every hospital to insure the sick and injured the best hospitalization and medical and surgical care available. Naturally the best service can be furnished only by those fully qualified and competent to treat all ailments and injuries. So, unless the hospital exercises extreme caution in its approval of those permitted to treat its patients it runs the chance of jeopardizing their health and lives, and fails to fulfill its obligation to the community by maintaining the highest standard possible.

Courts at law on numerous occasions have held that the official board of a hospital has the full authority to manage and operate the institution for the best interests of the patients and the public. This authority, of course, includes the right to say who shall, or shall not, be entitled to treat persons who have come to the hospital for medical and surgical service.

The attention of those interested in a few of the legal opinions in recent years on this question is called to the article published in the March, 1930, issue of the *Ohio State Medical Journal*, pages 251-252.

What attitude hospital officials or trustees should take in the matter of dealing with those incompetent and unqualified to practice in the institutions is obvious.

An illustration of the correct answer hospital boards should make to the demands of the unqualified is found in the following self-explanatory resolution recently adopted by the Board of Directors of the Marietta Memorial Hospital:

"Whereas osteopaths have asked that they be permitted to treat their patients in the Marietta Memorial Hospital on the same basis as graduate doctors of medicine, and

"Whereas, the Marietta Memorial Hospital is a typical, standard medical institution, having been built by the money contributed mainly by citizens who sought to provide a medical hospital such as in general use throughout the United States, and

"Whereas, the directors of the Marietta Memorial Hospital Corporation have no right to deviate from the generally accepted nation-wide standardized use of such medical hospitals which have had their origin through the practice of medicine exclusively; have been for generations and now are an essential part of the program originated by members of the medical profession in their care of the sick and injured; and are an inseparable part of the practice of medicine exclusively, and

"Whereas, the science of medicine which instituted and developed the modern hospital, such as in operation in Marietta, has protected life and health by requiring highest standards in practice on the part of both doctors and hospitals; has freely, consistently, and without monetary recompense given to society all of its many life-saving and health-protecting discoveries, it would therefore be inconsistent for the Marietta Hospital board to ignore and repudiate all the benefits contributed to humanity by the science of medicine and to violate all traditions and practices by throwing a medical hospital open to others than graduate doctors of medicine, and

Whereas, we the trustees of the Marietta Memorial Hospital, believe the best interests of the people of Marietta and vicinity would be jeopardized if there were to be any deviation from the rule to exclude all but graduate and approved medical men in good standing, since, otherwise there would be no reasonable limitation that could consistently be observed for the exclusion of any other real or alleged health-practitioner who might demand the use of the hospital, be it hereby,

"Resolved, that the request of the osteopaths for permission to treat their patients in the Marietta Memorial Hospital be denied."

The Marietta Memorial Hospital board through the adoption of the foregoing resolution disposed of an important and vital question in a courageous and correct manner. Other hospital boards confronted with the same problem should act accordingly, with the full realization that their action will be for the best interests of the people of their vicinity.

Deaths in Ohio

Curry F. Douglass, M.D., Toledo; Western Reserve University, School of Medicine, 1881; aged 71; former member of the Ohio State Medical Association and the American Medical Association; died September 20 at St. Vincent's Hospital, Toledo, where he had been a patient since April. Immediately following graduation, he started the practice of medicine in Kalida, Ohio. Always energetic and progressive, he helped mold the welfare and scientific attainments not only of his local society but of the state as well. His strength of character and fine personality soon attracted not only the physicians of his county but men of prominence from many parts of the state who came to his home to enjoy his hospitality and obtain advice.

In 1903, when the American Medical Association went through its reorganization, Dr. Douglass was one of the first to call the physicians of Putnam County together to help in this great work, and from that time on for twenty years by his constant encouragement and unfailing enthusiasm, he was the leader who not only inspired fine scientific programs, but each year entertained at his own home as many as one hundred doctors and their families, bringing together socially men who worked hard in their chosen profession so that they might relax and understand each other better. He is survived by his widow, one daughter, and two sons, one of whom is Dr. Fred M. Douglass of Toledo.

H. Hennerich Groth, M.D., Dayton; Hahnemann Medical College and Hospital of Philadelphia, 1879; aged 82; died September 25 following a long illness. Dr. Groth has been active in the medical profession for about 52 years, having practiced in Philadelphia, Savannah, Georgia, and Cincinnati before locating in Dayton 22 years ago. He is survived by his widow, one son and two daughters.

H. Webb Kelly, M.D., Piqua; Bellevue Hospital Medical College, New York, 1880; aged 73; died September 21. Following graduation Dr. Kelly opened an office in Galion where he practiced until 1901, when he removed to Piqua. In 1885 he was appointed surgeon for the Big Four Railroad, and for seven years was one of the lecturers at Ohio Medical College, Columbus. Surviving him are his widow, a son and a daughter.

George Glick Leist, M.D., Circleville; Medical College of Ohio, Cincinnati, 1891; aged 74; member of the Ohio State Medical Association and the American Medical Association; died September 10. Dr. Leist had practiced in Circleville for 26 years, and also at East Ringgold and Royalton. He is survived by his widow, two sons and two daughters.

Hiram B. Ormsby, M.D., Cleveland; Cleveland College of Physicians and Surgeons, 1897; aged 59; member of the Ohio State Medical Association and Fellow of the American Medical Association; died September 23 at Cleveland Clinic Hospital of peritonitis caused from swallowing a toothpick. Dr. Ormsby had practiced in Cleveland for nearly 40 years. His widow and two sisters survive him.

Albert W. Reddish, M.D., Sidney; Cleveland University of Medicine and Surgery, 1883; aged 71; member of the Ohio State Medical Association and the American Medical Association; died September 29 of heart disease. Dr. Reddish had practiced in Sidney since his graduation. Surviving him are his widow and two daughters.

Adelia A. Rohn, M.D., Defiance; Eclectic Medical College, Cincinnati, 1879; aged 76; died August 18 of heart disease. Dr. Rohn had practiced in Defiance for fifty years.

Walter Scott Spence, M.D., Hopedale; Western Reserve University School of Medicine, 1892; aged 63; member of the Ohio State Medical Association and Fellow of the American Medical Association; died September 19 of anemia and heart disease. Dr. Spence had practiced in Harrison County for many years until ill health forced him to retire last Spring. He is survived by two daughters, two brothers and a sister.

KNOWN IN OHIO

Lewis V. Guthrie, Huntington, West Virginia; College of Physicians and Surgeons, Baltimore, 1889; aged 67; died September 21. Dr. Guthrie practiced for many years at Point Pleasant, before his appointment as superintendent of the Spencer Asylum for the Insane. Later, he was transferred to the Huntington State Hospital. Dr. Guthrie was widely known as an alienist.

C. H. Strong, M.D., Newago, Michigan; Cleveland University of Medcine and Surgery, 1875; aged 76; died September 20. Before his retirement a few years ago, Dr. Strong practiced in Toledo. He is survived by his widow and one daughter.

NEWS NOTES of OHIO

Cincinnati—Dr. A. W. Nelson has returned after spending the summer in Europe.

Cleveland—Cleveland was represented at the Eighth International Dermatological Congress in Copenhagen, Denmark, by Dr. H. N. Cole and Dr. John Rauschkolb.

Cleveland—Dr. M. E. Blahd has resumed his practice after several weeks illness.

Cleveland—Dr. J. C. Kocour has sailed for Europe where he will take a six-months course in post-graduate surgery.

Cleveland—Announcement has been made of the marriage of Mrs. Helen L. Krug and Dr. Carl L. McDonald.

Cleveland—Dr. A. T. Childers, psychiatrist for the Cuyahoga County Juvenile Court for the past two years, has accepted a position as chief of the psychiatry staff of the State of Michigan.

Toledo—Dr. H. J. Parkhurst represented the Toledo medical profession at the International Dermatologist Congress held in Copenhagen, Denmark.

Millfield—Dr. C. Nile Saunders, formerly an intern at St. Francis Hospital, Columbus, has opened offices here.

Lima—Dr. Charles L. Mix, Chicago, and Dr. M. McKim Marriott, St. Louis, were the chief speakers at the annual post-graduate course conducted by the Allen County Academy of Medicine.

Warren—An interesting review of medical history was made before the local Rotary Club recently by Dr. J. D. Knox.

Millersburg—A talk on "The Rheumatic Heart" was made recently by Dr. C. T. Bahler, Walnut Creek, before the Millersburg Rotary Club.

Mansfield—Dr. Mabel Emery has been appointed house physician at the Mansfield General Hospital, being the first woman physician to hold the position.

Cincinnati—Eight specialists have been selected to lecture on the social aspects of preventive medicine before the medical students of the University of Cincinnati.

Toledo—Dr. W. R. Stephens, Trilby, who was injured in an automobile accident recently has been discharged from Flower Hospital where he was taken after the accident.

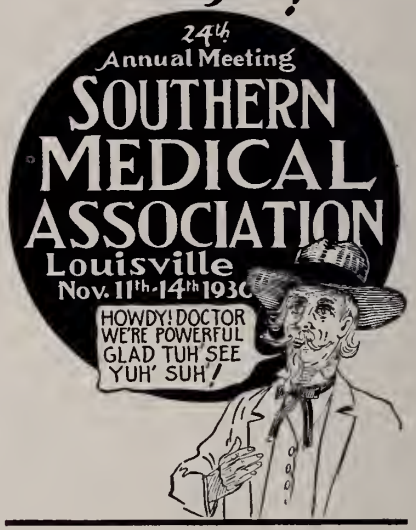
Lima—Lima physicians defeated Lima attorneys in their annual golf match played over the Shawnee Country Club course.

Sandusky—Dr. J. T. Haynes recently celebrated his fortieth anniversary as chief surgeon at the Ohio Soldiers' Home.

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MEMBERS of the OHIO STATE MEDICAL ASSOCIATION and its component local societies (white members) are cordially invited to attend the Louisville meeting and to enter heartily into all its activities—scientific and social. Louisville has ample and comfortable hotels, among them the Brown (headquarters), Seelbach, Kentucky, Henry Clay, Tyler, Kosair, Watterson, etc. Reduced round-trip railroad rates on certificate plan—certificates issued by Southern Medical Association, Birmingham, Alabama. Ask for one.

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PROMPT AND FULL REPORT

Milford Center—Dr. John D. Boylan has returned from Mt. Vernon where he took four months post-graduate and clinical work at the Ohio State Sanatorium.

Wooster—Dr. William A. Morton, formerly of Akron, has opened offices here.

St. Mary's—Dr. Guy E. Noble, who was taken suddenly ill while attending a medical clinic at Chicago, was removed to the Mayo Hospital, Richester, Minn.

Port Clinton—Dr. C. B. Finefrock has been appointed physician for the Port Clinton schools.

Xenia—A commission of five physicians has been appointed by Dr. H. C. Messenger, president of the Greene County Medical Society to aid health officials in combatting infantile paralysis. Those on the commission are Drs. T. F. Myler, W. T. Ungard and R. H. Grube, Xenia; R. L. Haines, Jamestown, and P. B. Wingfield, Yellow Springs.

Sandusky—The engagement of Mrs. Leontine Grover, Sandusky, to Dr. Richard Wallace, Cleveland, has been announced.

Logan—Dr. Allan A. Cole, graduate of the School of Medicine, Western Reserve University, is the new associate of Dr. E. E. Campbell, this city.

Newark—Dr. Harry E. Hunt joined the Hole-in-One Club at the Moundbuilders Country Club when he sank his tee shot on the No. 6, par 3 hole while playing with Dr. W. H. Knauss and Mr. and Mrs. Ralph Wyeth.

Massillon—Dr. Dean H. Minnis, formerly of Cleveland, has joined the staff of the Massillon State Hospital as an assistant physician.

Coshocton—Dr. J. W. Shaw has returned from a fishing trip near Quebec, Canada.

Waterford—Dr. Hugh Amos, of Cleveland City Hospital, has recently located here. Dr. Harry Dickson, formerly of Waterford, is now located at New Matamoras.

Delaware—Dr. M. S. Cherrington has returned from a six-months stay in Vienna where he visited and studied at the medical centers.

Covington—Dr. Gainor Jennings, West Milton, addressed the local Kiwanis Club recently on "Mental Hygiene".

The United States Civil Service Commission has announced open competitive examinations for medical officer, associate medical officer and assistant medical officer to fill vacancies in the U. S. Veterans' Bureau, U. S. Public Health Service, Coast and Geodetic Survey, Panama Canal Service and Indian Service. Applications must be on file with the Commission not later than December 20.

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News Notes From County Societies and Academies

First District

ACADEMY OF MEDICINE OF CINCINNATI

(D. T. Vail, Jr., M.D., Secretary)

September 29—Opening night, held at the Chamber of Commerce, with installation of new officers for the years 1930-1931; address of the retiring president, Dr. William Mithoefer, and address of the incoming president, Dr. L. Howard Schriver.

October 5—Program: "Carrell-Dakin Technique in Private Surgical Practice" (lantern slides), by Dr. L. B. Johnson; "Bone Tumors—Diagnosis and Treatment" (lantern slides), by Dr. Robert Cofield.

October 13—Program: "Some Observations on Medical Education and Research in the Far East," by Dr. W. B. Wherry.—Bulletins.

Butler County Medical Society held its regular meeting at the Middletown Hospital, Middletown, on Wednesday afternoon, October 8, with 37 members present. Dr. Mabel E. Gardner, Middletown, presented a paper on "Pubiotomy," and Dr. Harold F. Downing, Cincinnati, spoke on "Early Symptoms and Diagnosis of Acute Infantile Paralysis." At the business session a committee on revision of the Constitution and By-Laws, and a committee to nominate new officers, were appointed, with instructions to report at the November meeting. A bountiful, six-o'clock dinner was served at the nurses' home.—P. E. Decatur, Secretary.

Clermont County Medical Society held its October meeting at Marathon, on Wednesday, October 15. "Allergy and Its Significance to the General Practitioner," was the subject of an address by Dr. George E. Rockwell, of Cincinnati.—Bulletin.

Fayette County Medical Society met at the Y. M. C. A. Thursday afternoon, October 2, and heard an address by Dr. Reyburn McClellan, of Xenia, Ohio, on "Loss of Weight" as the principal complaint of presenting patient. He outlined what you should think of and the proceedings you should follow to make a diagnosis. The talk was well prepared and well presented to the instruction and delight of all present. The Committee on Constitution Revision reported, and their draft on the Constitution will be voted on at the November meeting, after each member has had a copy to read in the meantime. Meeting adjourned until November 6, 1930.—James F. Wilson, Secretary.

The September meeting of the Fayette County Medical Society was addressed by Dr. James F.

URINE
BLOOD
SPUTUM
EFFUSIONS
STOMACH CONTENTS
WASSERMAN & KAHN PRECIPITIN TESTS
GONORRHEAL COMPLEMENT FIXATION TEST
BLOOD CHEMISTRY
PROTEIN SENSITIZATION TESTS
BASAL METABOLISM
AUTOGENOUS VACCINES
FAECES
GENITO-URINARY SURGICAL and GYNECOLOGICAL PATHOLOGY
DARK FIELD ILLUMINATING FOR SPIROCHETA PALLIDA
MEDICO-LEGAL POST-MORTEMS
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Wilson, County Health Commissioner, who spoke on "Better Health of Babies."—News Clipping.

Warren County Medical Society held its regular monthly meeting at Harmon Hall, Lebanon, on Tuesday, October 7. Dr. C. G. Randall read a paper on "J. Marion Sims and Some Notes on Other Early American Physicians," and Dr. Edward Blair spoke on "Paralysis Agitans."—News Clipping.

Second District

Darke County Medical Society held its first meeting of the Fall on Friday evening, October 10, at Small's Restaurant, Greenville. Following dinner at 6:30, Dr. W. B. Taggart, of Dayton, spoke on the subject of "Some Problems of Infant Feeding."—Bulletin.

Miami County Medical Society met at the Memorial Hospital, Piqua, on Friday afternoon, October 3. The session was devoted to the presentation of interesting case reports by members, and a discussion of the infantile paralysis epidemic. Dinner was served at the nurses' home following the meeting.—Bulletin.

Montgomery County Medical Society held its first meeting for the year 1930-31 at the Fidelity Medical Building auditorium on Friday evening, October 3. "A Dayton Doctor Looks at British Medicine" was the subject of a short talk by Dr. Walter M. Simpson.—Bulletin.

Third District

Logan County Medical Society invited members of Allen, Champaign, Hardin, Shelby, and Union County Medical Societies, to attend a meeting held at Hotel Ingalls on Friday evening, September 19. Dr. Walter M. Simpson, director of Diagnostic Laboratories at Miami Valley Hospital, Dayton, in his address before the society, reviewed his findings in 110 cases of undulant fever which he investigated.—News Clipping.

Marion County Medical Society held its regular monthly meeting October 14 at the Marion City Hospital. The program consisted of a paper, "Progress in Obstetrics", by Dr. S. J. Goodman, Columbus, and one on "Pain in the Left Chest", by Dr. E. F. McCampbell, Columbus. The program was followed by a general discussion on economic, social and political questions. A supper was served to the many members of the society who attended.

Fourth District

TOLEDO ACADEMY OF MEDICINE

(A. P. Hancuff, M.D., Secretary)

October 3—General Meeting, Academy Building. Program: "The Relation of Gynoplastic Repair to Modern Obstetrics" with Motion Picture and Lantern Slide Demonstration, by Dr. J. L. Bubis, Mt. Sinai Hospital, Cleveland.

October 10—Section of Pathology, Experimental Medicine and Bacteriology. Program: "An Apparatus for the Treatment of Fractures of the Os Calcis," by Dr. E. P. Gillette; "A Case of Banti's Disease," by Dr. W. A. Taylor; "A Case of Ulcerative Colitis," by Dr. J. J. Sweeney; "A Case of Extensive Burns, with Recovery," by Dr. H. J. Murphy.

October 17—Medical Section. Program: "Late Puerperal Hemorrhage," by Dr. M. W. Diethelm; "Streptococcic Septicemia complicated by Erythema Multiforma Bullosa, following Sore Throat" (Case Report), by Dr. F. N. Nagel; "An Unusual Heart Mechanism" (Case Report), by Dr. S. R. Salzman; "Osteomyelitis of Crest of Ilium"

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District No. 12—398 N. Garfield Ave., Columbus, Ohio. Phone FAirfax 3615
District No. 15—Portsmouth General Hospital, Portsmouth, Ohio. Phone: 559

(Case Report), by Dr. N. T. Barnes; "Hodgkin's Disease" (Case Report) by Dr. A. J. Regent.

October 24—Surgical Section. Program: "Ruptured Duodenal Ulcer with Complicating Duodenal Fistula," by Dr. W. W. Beck; "Urethral Calculi" (Case Report), by Dr. A. D. Vogelsang; "Appendicitis with Unusual Complications" (Case Report), by Dr. H. H. Heath; "An Unusual Case," by Dr. E. J. McCormick.

October 31—Joint meeting of the Toledo Academy of Medicine and the Clinical Orthopedic Society. "Newer Apparatus in the Treatment of Fractures of the Femur" with Lantern Slide Demonstration, by Dr. George W. Hawley, Bridgeport, Connecticut. Buffet supper at the University Club after the meeting.—Bulletin.

Fifth District

Lorain County Medical Society held its regular monthly meeting at Oberlin Inn, on Tuesday, October 14, commencing with a five o'clock dinner. The program included a paper on "Undulant Fever," with report of a case, by Dr. J. W. Boss, of Birmingham; "Impressions of a Recent Trip Abroad," by Dr. Gertrude Moulton, Oberlin; and a letter addressed to the Lorain County Medical Society in 1917, to be read to the Society for the first time, by Dr. W. E. Hart, Elyria. —Bulletin.

Sixth District

Mahoning County Medical Society held its regular meeting on Tuesday evening, September 30, at the Youngstown Club, Youngstown. The speaker of the evening was Dr. Charles W. Stone, of Cleveland, who discussed the subject, "Mental Disturbances Seen in General Practice." The meeting was followed by a buffet luncheon.

The October meeting of the Society was held on Thursday, October 9, with a clinic during the day, and an address in the evening by Dr. P. Brooks Bland, Professor of Gynecology, Jefferson Medical College, Philadelphia.—Bulletin.

Richland County Medical Society held an all-day outing at Lake Shore Inn, on Lake Erie, on Thursday, September 18. Golf, swimming, boating, and fishing made up the program for the event.—News Clipping.

Stark County Medical Society met at the Medical Library Room, Canton, on Tuesday evening, October 7, for its regular meeting. The program was as follows: "Sterility and Its Treatment," by Dr. L. E. Leavenworth; "A Review of Recent Literature on Medicine," by Dr. C. B. King; "A Review of Recent Literature on Surgery," by Dr. L. L. Lawrence.—Bulletin.

Summit County Medical Society met at the Akron City Club on Tuesday evening, October 14. "The Serology and Treatment of Syphilis" was the subject of an address by Dr. John A. Kolmer, Professor of Pathology and Bacteriology, of the Graduate School of Medicine, University of Pennsylvania.—Bulletin.

Seventh District

Tuscarawas County Medical Society held its regular monthly meeting in the mayor's office at Dover on Thursday evening, September 11. Dr. Wayne Brehm, Columbus, presented a paper on "Some Recent Developments Concerning Sterility."—Bulletin.

Eighth District

Athens County Medical Society held a luncheon meeting at Hotel Berry, Athens, on Monday, October 6, with more than fifty physicians including guests from adjoining county medical societies, in attendance. Dr. Wm. Mithoefer, Cincinnati, spoke on "Practical Points in Combating Nasal Accessory and Sinus Diseases." Dr. C. N. Sanders, Millfield, who recently completed his internship at St. Francis Hospital, Columbus, was elected to membership in the Society.—News Clipping.

Muskingum County Academy of Medicine held its October meeting in the Rogge Hotel, Wednesday evening, October 1, with twenty-seven members present for the dinner and the business session which followed. The program included a

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Travelogue, featuring the Passion Play, by Dr. O. I. Dusthimer. Dr. Beatrice T. Hagen presented a paper on "Anesthesia." Dr. Sterling W. Obenour, Roseville, was elected to membership in the Society.—Beatrice T. Hagen, Secretary.

Fairfield County Medical Society met at the Florentine restaurant, Lancaster, on Tuesday, September 16, with twenty-five members present at the noon luncheon. Dr. Robert Drury, of Columbus, was the visiting speaker.—News Clipping.

Washington County Medical Society met at Memorial Hospital, Marietta, on Wednesday evening, September 24. The meeting, which was the first held since last May, was well attended. Dr. Hugh A. Baldwin, Columbus, presented a very interesting paper on "Tubercular Infection of the Kidneys." Dr. A. Howard Smith, Marietta, also addressed the society.—News Clipping.

Ninth District

Scioto County—Hempstead Academy of Medicine held its regular meeting at the Nurses' Home, Portsmouth, on Monday evening, October 13. "The Nature of Mild Affective Disorders" was the subject of a paper by Dr. G. T. Harding, Jr., of Columbus. Discussion was opened by Dr. O. D. Tatje. A buffet lunch followed the meeting.—Bulletin.

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

September 22—Regular meeting of the Academy, held at the Columbus Public Library. Program: "Problems of the Prostate," by Dr. William E. Lower, of Cleveland.

September 29—Program: Symposium on The Common Cold: Symptoms and Diagnosis, by Dr. C. H. Wells; Etiology and Pathology, by Dr. L. H. Van Buskirk; Treatment, by Dr. Howard Whitehead; Complications, case reports. Refreshments and a social hour followed the program.

October 6—Regular meeting, held at Mt. Carmel Hospital, with a medical and surgical clinic by the Staff of Mt. Carmel Hospital.

October 13—Program: "Forceps Delivery and Episiotomy," with moving pictures, by Dr. J. P. Greenhill, associate of Dr. J. B. DeLee, of Chicago.—Bulletin.

Ross County Medical Society held its regular meeting on Thursday evening, October 2, at Hotel Warner, Chillicothe, with a splendid attendance. The visiting essayist was Dr. Verne A. Dodd, of Columbus.—News Clipping.

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¼ cup cold water	....	....	....	....	....
1¼ cups boiling water	....	....	....	....	....
2 tablespoons lemon juice	20	....	....	2	....
½ teaspoon salt	....	....	....	....	....
1½ cups cooked spinach, chopped	300	6	....	7	....
2 hard cooked eggs	100	13	10.5	....	....
Total		28	10.5	9	242.5
One serving		5	2	1.5	40

Soak gelatine in cold water and dissolve in boiling water. Add lemon juice, salt, strain and chill. When nearly set, stir in chopped spinach, mold and chill until firm. Serve on lettuce hearts or tender chicory leaves and garnish with hard cooked egg, cut lengthwise in sixths and sprinkled with paprika. Serve with mayonnaise.

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	Grams	Prot.	Fat	Carb.	Cal.
2 teaspoons Knox Sparkling Gelatine	4.5	4	....	....	....
¼ cup cold water	....	....	....	....	....
½ cup hot water	....	....	....	....	....
½ teaspoon salt	....	....	....	....	....
¼ cup vinegar	....	....	....	....	....
1½ cups grated cheese	150	43	54	....	....
½ cup chopped stuffed olives	70	1	19	8	....
½ cup chopped celery	60	1	....	2	....
¼ cup chopped green pepper	25	....	....	1	....
½ cup cream, whipped	75	2	30	2	....
Total		51	103	13	1183
One serving		8.5	17	2	197

Soak gelatine in cold water. Bring hot water and salt to boil and dissolve gelatine in it. Add vinegar and set aside to chill. When nearly set, heat until frothy, fold in cheese, olives, celery, pepper and whipped cream. Turn into molds and chill until firm. Unmold on lettuce leaf and serve.

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PUBLIC HEALTH NOTES

—A comparative study of mortality statistics in Ohio during the past 20 years has been made by the Division of Vital Statistics, State Department of Health, revealing some interesting data concerning health conditions in general in the state. The study shows:

That while the urban districts of the state have increased 72 per cent in population since 1910 the increase in the number of deaths in urban communities has been but 44.6 per cent; and that while rural districts have increased in population 6 per cent, they have shown a deathrate decrease of only 1.5 per cent.

That the general death rate of the state was 12.1 in 1929 compared to 13.7 in 1910.

That 24 per cent of all deaths in 1929 were among persons under 30 years of age, compared to 36 per cent in 1910.

That heart disease ranks as the chief cause of death in Ohio during the past 20 years with a rate of 70.08.

—Marked increase in the number of cases of infantile paralysis in Ohio has prompted the State Department of Health to issue a number of bulletins on the prevention and care of the disease. It is pointed out in one of these that a study of more than 1000 cases during the 1927 epidemic revealed that contact with either case or carrier was the only method of spread. It also emphasized that the definite paralyzed case is not the one that is most dangerous to the community because being easily recognized it usually is promptly quarantined and properly cared for.

—A series of lectures is being presented by the Cleveland Mental Hygiene Association, among the speakers being: Dr. C. E. A. Winslow, Yale University; Dr. Hornell Hart, Bryn Mawr College; Dr. Joseph Jastrow, University of Wisconsin; Dr. Franz Alexander, University of Chicago, and Dr. Esther L. Richards, Johns Hopkins University.

—Analysis of mortality figures among industrial policyholders of the Metropolitan Life Insurance Company from 1911 to 1929, inclusive, shows a substantial reduction in the number of deaths certified as due to heart disease at ages under 45 years and a steady rise in the heart disease deathrate among persons 45 years of age or more.

—Resignation of Dr. Harry L. Rockwood as health commissioner of Cleveland to become director of Mt. Sinai Hospital, that city, removes from the public health field one who has achieved state-wide and national prominence in health work. Dr. Rockwood held the position of commissioner of health of Cleveland for 12 years, during which time he established an enviable record

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for efficiency and coordination of medical and health groups. He has been succeeded as commissioner by Dr. H. J. Knapp, who for 10 years has been affiliated with the Cleveland Health Department as head of the city bureau of food and drug administration, is a chemist of state-wide reputation and is a graduate of Kenyon College and the School of Medicine, Western Reserve University.

Attention of Ohio health commissioners has been called to a new provision of the Ohio Election Law which requires the health commissioner of a registration city to make monthly reports to his local board of elections of the names and residence addresses of all persons, over 21 years of age, who have died within the city during the month, for elimination by the board from the registration list. Legal forms for submitting these reports may be obtained from the boards of election.

—Tenth annual Ohio Water Purification Conference was held in Columbus, October 14 and 15, at the Fort Hayes Hotel. The activities of the meeting were under the direction of O. F. Schoeffle, Sandusky, chairman; F. E. Sheehan, Portsmouth, vice chairman; J. M. Montgomery, Piqua, secretary-treasurer, and J. S. Scott, Steubenville, and George M. Lieber, Fremont, members of the executive committee. Many who attended the Columbus meeting also attended the Fourth Annual Conference on Sewage Treatment, held at Dayton, on October 16 and 17.

HOSPITAL NOTES

—At the annual meeting of the staff of Bethesda Hospital, Zanesville, the following officers were re-elected: Dr. C. U. Hanna, president; Dr. C. H. Higgins, vice president; Dr. D. J. Matthews, secretary, and Dr. L. E. Grimes, treasurer.

—All of Cleveland's hospitals have been ordered to provide emergency lighting equipment for their operating rooms.

—Alfred H. Simmons, New York hospital executive, has been appointed supervisor of the Alliance City Hospital, succeeding Frank W. Hoover, who has been named superintendent of the Elyria Memorial and Gates' Crippled Children's hospitals.

—Miss Jessie Bumford, superintendent of the Monnette Memorial Hospital, Bucyrus, for the past three years, has resigned.

—Dr. H. T. Sutton was elected president of the Zanesville Good Samaritan Hospital staff at its annual meeting. Other officers elected are: Dr. H. R. Geyer, vice president and Dr. L. M. Levi, secretary.

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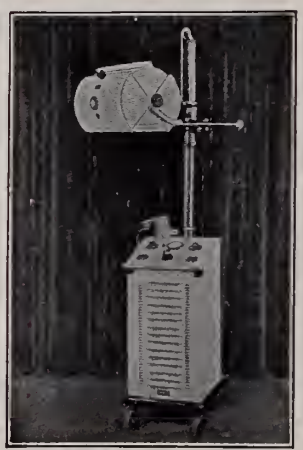
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—Members of the Lima City Commission have authorized the floating of a $600,000 bond issue voted in 1927 by the people for a municipal hospital.

—The following Ohio hospitals have been approved for the training of interns since publication of the approved list by the Council on Medical Education and Hospitals of the American Medical Association: Bethesda Hospital, Christ Hospital, Jewish Hospital and St. Mary Hospital, all of Cincinnati.

—A sum of $1500 was left St. Francis Hospital, Columbus, by the late Katherine R. Clahane, for the outfitting of a room to be known as the Clahane Memorial Room.

—Miss Mary Binkley, Newark, has been named superintendent of the Coshocton City Hospital, succeeding Miss Lenora Wheaton, resigned.

—City Council of Ashtabula has been asked by the directors of the General Hospital to place a special levy for $150,000 before the voters in November. Unless necessary improvements are made on the building the hospital will be forced to close within the next six months, the hospital directors declared.

—A gift of $5,000 in memory of his parents, the late Dr. and Mrs. W. E. Loughridge, has been given the Mansfield General Hospital by Edward W. Loughridge.

Factors in Industrial Medical Service as Shown by Survey by the Metal Trades Association

Some idea as to the extensiveness and rapid expansion of medical services being supplied to workers in industry is gained through analysis of a study of the medical services provided in the metal industries, made by a committee on industrial relations of the National Metal Trades Association.

Replies to questionnaires as to the character of first aid and medical services rendered to employes were received from 328 companies, over half of whom reported that the medical services were confined strictly to first aid to the injured.

Some of the interesting points revealed by replies received by the committee were:

One hundred and thirty-three companies reported that in addition to first-aid treatment more or less additional medical care was given.

In 74 cases additional medical care included complete treatment to injured employes; in 90 cases, preliminary treatment to sick employes; in 10 cases, sick employes received complete treatment; in 13, dental treatment; in 32, optical treatment and in 39, *X*-ray examinations.

Eighty-six companies reported giving more or less complete physical examinations to new employes.

In 46 cases medical service is extended to the home treatment of employes either on the advice of the visiting nurse or at the request of the employe.

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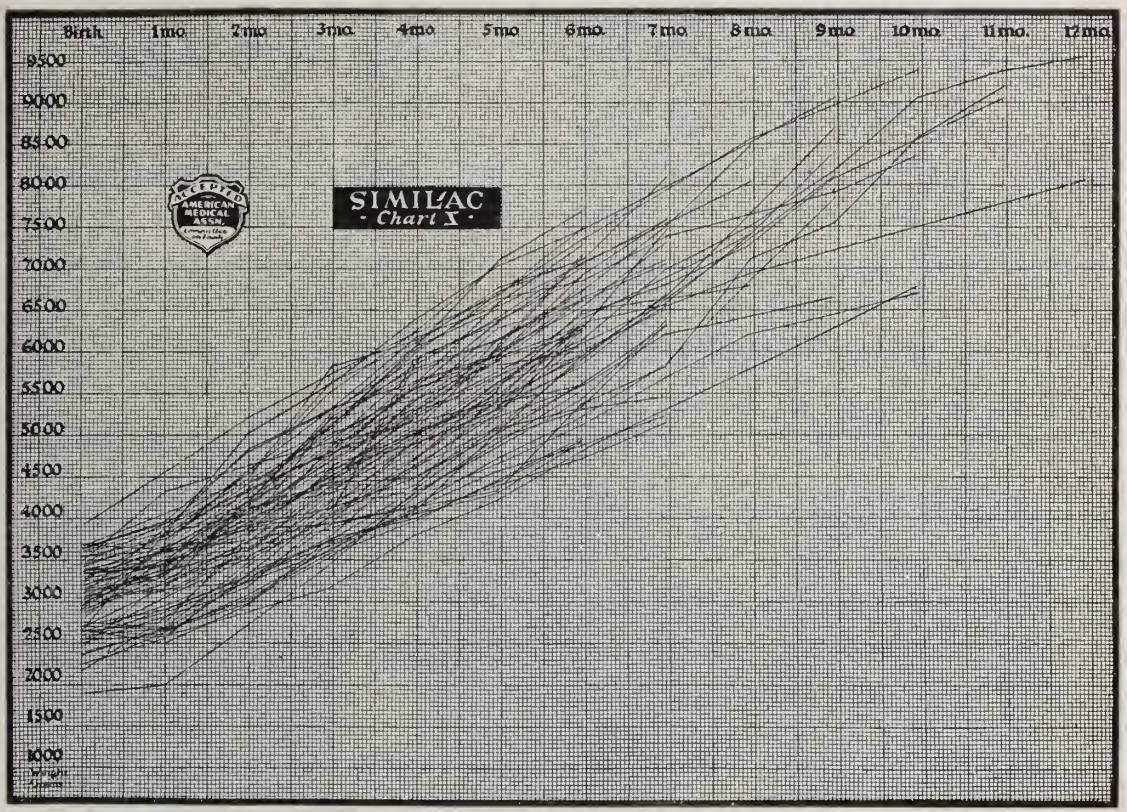
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Duration of Feeding—Six Months or Longer

Each line represents the weight curve of one infant, and the age of the infant at the time the chart was made, all cases here recorded still being fed Similac. No weight curve has been recorded on this chart unless the infant had been on the feeding of Similac for at least six months.

Formula Used

The infants were started on Similac at birth, the Similac being prepared in the proportion of one ounce of Similac by weight to 7½ ounces of water, and were fed an amount of this mixture daily, each feeding period lasting not longer than twenty minutes. The amount of Similac offered the infants was in accordance with their demand for food, there being no set rule as to the quantity which was given. At no time were they urged to take all food offered.

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In addition to the feeding of Similac, each infant received four c.c. of cod liver oil and at least one ounce of orange juice or two ounces of tomato juice daily. The amount of orange or tomato juice was gradually increased. Vegetable pulp and cereals were added to their diets, but in all cases Similac constituted the only milk feeding that the infants, whose weights are represented on this chart, received.

No Intestinal Disturbances

One of the most striking features of these cases was the lack of intestinal disturbances. The hospital histories of these seventy-five cases do not record a single instance where the feeding of Similac had to be discontinued because of a gastro-intestinal upset. Neither do they record the administration of any cathartic. The fact that not one of them had to have its diet changed because of an intestinal upset is rather remarkable in view of the possibility of cross infection which always exists in a hospital.

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In 10 cases medical treatment is given to any member of the employe's family.

The medical departments in a number of instances supervise the heating, lighting, ventilation and general sanitation of the plants, while others carry on active health promotion education and in three cases research work on clinical cases, painting and paint spraying and atmospherics was reported.

Physicians, either full-time or part-time, were employed by 105 companies and graduate nurses by 102 companies.

Thirty-two firms reported regular employment of oculists, or optometrists, dentists, hygienists, etc.

Complete cost figures of the medical departments were reported by 66 firms with an average of 1,207 employes per company, the total annual cost in these plants being $470,977, or $5.91 per employe.

Nine companies with an average of 2,583 employes, hiring physicians on a full-time basis, reported total annual costs of $136,554.45, or an average of $5.87 per employe.

The cost of medical services of companies employing full-time nurses and part-time doctors was estimated by 23 companies having an average of 1,056 employes each, the total cost being $174,885.81, or an average of $7.20 per employe.

The average costs in other groups ranged from $4.34 per employe in 24 plants employing full-time nurses and physicians only as needed, to $6.33 per employe in six smaller plants which employed practical nurses or persons trained in first aid only but in which doctors and trained nurses were called for special service.

The salaries paid industrial physicians according to the reports of 54 companies average $4,354.51 per year, or $3.85 per employe, the salary range in nine cases being from $2600 to $8,221.

The average cost for physicians for 24 companies reporting part-time doctors, whose hours ranged from 2 per week to 4 per day, was $2,205.58, while the payments by 16 companies who employed physicians occasionally averaged $8,175.39, or $11.15 per employe.

Nurses' salaries paid by 57 companies averaged $1,802.31, or $1.60 per employe.

The salaries and fees paid to dentists averaged $969.57 per year; to oculists and optometrists, (not properly distinguished in the report) $424.15, and to other specialists, $559.72, the number of companies reporting on these points ranging from 7 to 15.

Eighty-seven companies reported that there had been a considerable reduction in the number of accidents as a result of operation of a medical department. Thirteen companies estimated medical service had resulted in a reduction in compensation insurance costs, averaging 28.7 per cent, and 15 companies reported a reduction in absenteeism, averaging 50.6 per cent.

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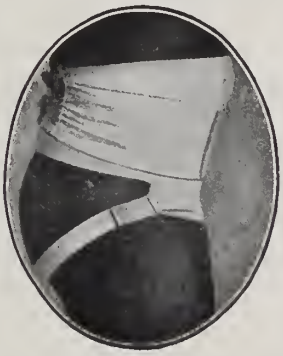
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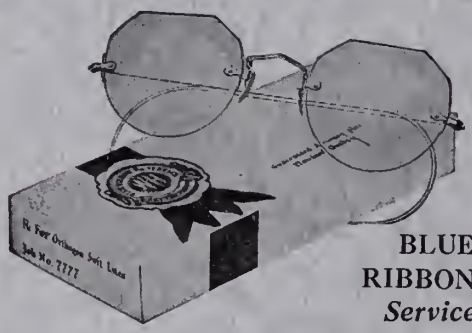
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AS A MEDIUM OF SERVICE TO ITS MEMBERS

DECEMBER, 1, 1930 VOLUME XXVI
Number - - 12

OF M ICINE
1930
ARY

Merry Christmas

May The Holiday Season and The Year's End Be a Time of Happiness and Satisfaction to You and Yours.

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Holmes	J. C. Elder, Millersburg	A. T. Cole, Millersburg	1st Tuesday, quarterly, Jan., April, July, October.
Mahoning	H. J. Beard, Youngstown	J. P. Harvey, Youngstown	3d Tuesday, monthly.
Portage	W. B. Andrews, Kent	E. J. Widdecombe, Kent	1st Thursday, monthly.
Richland	Leopold Adams, Mansfield	D. C. Lavender, Mansfield	3d Thursday, monthly.
Stark	R. J. Shipley, Canton	F. S. VanDyke, Canton	3d Tuesday, Jan., March, May July, Sept., Nov.
Summit	R. E. Amos, Akron	A. S. McCormick, Akron	1st Tuesday, monthly.
Wayne	W. B. Turner, Wooster	R. C. Paul, Wooster	2d Tuesday, monthly.
Seventh District	A. E. Weinstein, Steubenville	Carl Goehring, Steubenville	Steubenville, 1931
Belmont	C. J. Holley, Bridgeport	C. W. Kirkland, Bellaire	2d Wednesday, monthly at 1:45 p.m.
Carroll	(With Stark Co. Society)		
Columbiana	R. T. Holzbach, Salem	T. T. Church, Salem	2d Tuesday, monthly.
Coshocton	F. M. Marshall, Coshocton	J. D. Lower, Coshocton	4th Thursday, April, June, Sept., December.
Harrison	J. M. Scott, Scio	R. P. Rusk, Cadiz	3d Wednesday, monthly.
Jefferson	V. B. Di Loreto, Steubenville	M. H. Rosenblum Steubenville	Last Friday, monthly.
Monroe	G. W. Steward, Woodsfield	A. R. Burkhart, Woodsfield	2d Wednesday, monthly.
Tuscarawas	Jay W. Calhoon, Uhrichsville	R. E. Wolf, Uhrichsville	1st Thursday, monthly.
Eighth District	J. G. Shirer, Newark	H. A. Campbell, Newark	
Athens	C. C. Butt, Nelsonville	T. A. Copeland, Athens	1st Monday, monthly.
Fairfield	A. A. Brown, Carroll	C. W. Brown, Lancaster	2d Tuesday, monthly.
Guernsey	C. L. Vorhies, Cambridge	Gordon Lawyer, Cambridge	1st and 3rd Tuesday each month.
Licking	E. A. Moore, Newark	D. A. Skinner, Newark	Last Friday, monthly.
Morgan	D. G. Ralston, McConnelsville	C. E. Northrup, McConnelsville	3d Wednesday, monthly.
Muskingum	W. F. Sealover, Zanesville	Beatrice Hagen, Zanesville	1st Wednesday, monthly.
Noble			First Thursday, monthly.
Perry	R. W. Miller, Hemlock	F. J. Crosbie, New Lexington	3d Monday, monthly.
Washington	J. B. Penrose, Marietta	J. R. Warren, Marietta	2d Wednesday, monthly.
Ninth District			
Gallia	O. A. Vornholt, Gallipolis	Milo Wilson, Gallipolis	1st Thursday, monthly.
Hocking	O. V. Donaldson, Gore	M. H. Cherrington, Logan	
Jackson	Gomer E. Jones, Oak Hill	W. R. Riddell, Jackson	1st Tuesday, monthly.
Lawrence	G. G. Hunter, Ironton	F. R. Stewart, Ironton	1st Thursday, monthly.
Meigs	P. A. Jividen, Rutland	Byron Bing, Pomeroy	1st Thursday, April, July and Oct.
Pike	O. R. Eylar, Waverly	L. E. Wills, Waverly	1st Monday, monthly.
Scioto	T. C. Crawford, Portsmouth	C. M. Fitch, Portsmouth	2d Monday, monthly.
Vinton	O. S. Cox, McArthur	H. S. James, McArthur	3d Wednesday, monthly.
Tenth District			
Crawford	Clarence Adams, Galion	R. M. Malone, Galion	1st Monday, monthly.
Delaware	M. S. Cherington, Delaware	A. R. Callander, Delaware	1st Friday, monthly.
Franklin	R. B. Drury, Columbus	James A. Beer, Columbus	1st four Mondays.
Knox	W. H. Eastman, Fredericktown	J. Shamansky, Mt. Vernon	Last Thursday, monthly.
Madison	R. H. Trimble, Mt. Sterling	H. P. Sparling, London	4th Wednesday.
Morrow	F. E. Thompson, Marengo	Todd Caris, Mt. Gilead	1st Wednesday, monthly.
Pickaway	J. B. May, New Holland	Lloyd Jonnes, Circleville	1st Friday, monthly.
Ross	John Franklin, Chillicothe	W. C. Breth, Chillicothe	1st Thursday, monthly.
Union	F. M. Wurtsbaugh, Richwood	H. C. Duke, Richwood	2d Tuesday, monthly.

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No dosage directions accompany MEAD'S VIOSTEROL in Oil, 250 D

originally called Acterol

···EFFECTIVE··· OCTOBER 1st, 1930

Mead's Viosterol in Oil is now designated 250 D because, in accordance with the provisions of the Wisconsin Alumni Research Foundation, we are now assaying the product by the Steenbock method. Before October 1, 1930, this same product was assayed by the McCollum-Shipley method and was designated 100 D. This was done in the belief that this method gave results comparable with that prescribed by the Wisconsin Alumni Research Foundation for its licensees. It was discovered, however, that when assayed by this method the potency of the product was virtually 250 D in comparison with products standardized by the Steenbock method.

Mead's Viosterol in Oil, 250 D (Steenbock method)—in normal dosage—is clinically demonstrated to be potent enough to prevent and cure rickets in almost every case. Like other specifics for other diseases, larger dosage may be required for extreme cases. It is safe to say—based upon extensive clinical research by authoritative investigators (reprints on request)—that when used in the indicated dosage, Mead's Viosterol in Oil, 250 D is a specific in almost all cases of human rickets, regardless of degree and duration, as demonstrated serologically, roentgenologically and clinically.

The change in Mead's Product is in designation only—not in actual potency. Mead's Viosterol in Oil, 250 D —in proper dosage—continues to prevent and cure rickets.

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A Tried and True Ally of the Physician for many years

Wagner's Artificial Vichy has amply proved its efficacy in alkaline medication of "colds" and the various acute respiratory infections usually prevalent at this season of the year.

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However, the Doctor who carries a Medical Protective Contract enjoys the assurance that his trouble will not be relegated to an inexperienced department of a large company concerned chiefly with other insurance lines but will be given expert personal attention by the strongest company which engages in professional protection exclusively.

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11-30

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DIGALEN
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represents the cardio-active glucosidal complex of digitalis in a sterile isotonic solution of distilled water, glycerine and alcohol in proportions which guard against deterioration. It contains only the beneficial principles of the leaf. It does not contain constituents of the leaf which are devoid of therapeutic valuc. It is gravimetrically prepared by Cloetta's method and biologically standardized. Orally, or by intramuscular or intravenous injection, Digalen gives the full therapeutic effect of digitalis . . . . . .

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Makers of Medicines of Rare Quality
NUTLEY NEW JERSEY

¶ Digalen is the choice of many eminent cardiologists.

¶ It is the digitalis routinely used in a great many hospitals throughout the world.

INDICATIONS:

In acute chronic cardiac insufficiencies: e.g., auricular fibrillation, left ventricular failure, dilatation, cardiac asthma, pulmonary edema, right ventricular failure with systemic edema. In pneumonia, influenza, emergencies and collapse. . . .

DOSAGE:

Orally: 1 to 2 cc. three times daily. *By injection:* 1 to 2 ampuls (1 to 2 cc.) intravenously, in emergencies more, followed by intramuscular injections of 1 to 2 cc. every three hours, as required . . . . . .

Issued in vials of 15 cc.; ampuls 1.1 cc., cartons of 6 and 12 and cartons of 100 for hospitals; oral tablets (representing ½ cc. liquid), vials of 25; hypodermic tablets (representing 1 cc. liquid), tubes of 15; special hospital packages of 25, 50 and 100 vials . . .

COUNCIL-ACCEPTED

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All-Over Elastic Support

MUCH of a man's success depends on his air of alertness and vigor. Also, bad posture and carriage affect general health. To assist men in maintaining alertness, Camp offers this new knitted elastic belt. It acts as a reducer of superfluous flesh, lends abdominal support, helps keep the torso erect—giving a generally correct appearance. The famous *Camp Patented Adjustment* provides the degree of tightness desired. The garment is comfortable and easy to manipulate. Made in different body heights. The therapeutic correctness of Camp Supporting Garments has gained for them the approval of physicians and surgeons everywhere. Sold at the better drug and surgical houses.

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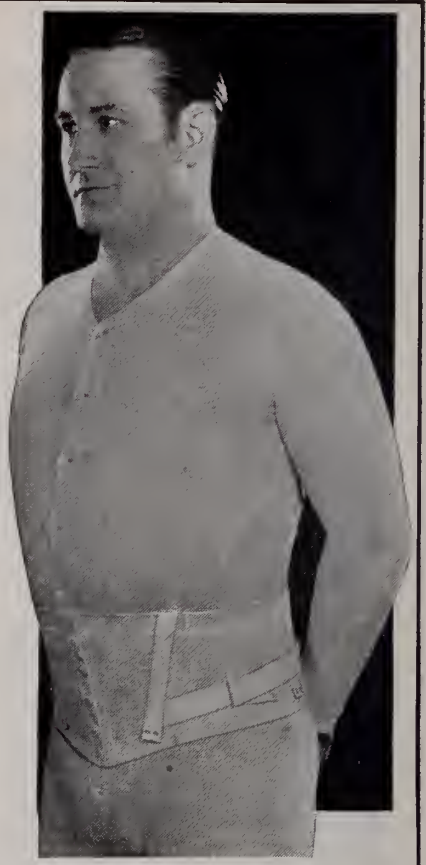
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PHYSICIAN READERS OF THIS JOURNAL WHO HAVE DESIRED TO MAKE A "WIDER THAN MERE SAMPLE TEST" OF THE FOLLOWING "COUNCIL ACCEPTED" PREPARATIONS ARE NOW GIVEN A WORTHWHILE OPPORTUNITY IN OUR INTRODUCTORY OFFER.

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ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry

COMPOUND SYRUP OF CALCREOSE is a tasty, effective cough syrup that does not nauseate. Each fluid ounce represents Calcreose Solution, 160 mins.; Alcohol, 24 mins.; Chloroform, approximately 3 mins.; Wild Cherry Bark, 20 grs.; Peppermint, Aromatics and Syrup, q.s.

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With your purchase of one thousand Tablets Calcreose 4 grs., price $3.00, postpaid, 30 days dating, we will include FREE one dozen 3 oz. Compound Syrup of Calcreose, value $3.00, equipped with blank direction labels. You may return this portion of advertisement with your name and full address on bottom margin, if preferred.

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Modern Bakers *are* Magicians *with Flour, Eggs, Butter, Milk and* Sugar



THIS is one of the advertisements of The Sugar Institute, appearing in newspapers throughout the country. In order to keep the statements in accord with modern medical practice, they have been submitted to and approved by some of the leading authorities in the field of human nutrition in the United States.

IF IT were not for those dainty cookies, wafers, sweet crackers and cakes made by the great baking companies of this country and sold at grocery stores everywhere — what would ladies do at their teas and bridge parties — what would we do for desserts?

Alluring indeed are the creations of these bakers. And the marvel of it is that they come to us oven-fresh. What a tribute to the careful way they are made, packed and delivered.

There is a place in every balanced diet for these inviting inexpensive cookies and cakes. They round out the meal and make everybody satisfied and happy.

Too many of our meals are lacking in enjoyment because sugar has been left out. Try a dash of pure cane sugar in the essential foods, such as vegetables, fruit and cereals, and see how much better they taste. Doctors and dietitians heartily recommend this use of sugar as a flavor. The Sugar Institute, 129 Front Street, New York.

"A bit of sweet makes the meal complete"

H. IRVING COZAD, M.D.
G. DEAN TIPTON, M.D.

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¶ Any NERVOUS or MENTAL CONDITION which in the judgment of the attending physician needs our care, protection or treatment will be received at any time that we have the suitable environment available.

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THE McMILLEN SANITARIUM
Cor. Nelson Road and East Fifth Ave.
SHEPARD—COLUMBUS, OHIO
R. A. KIDD, M.D., Superintendent

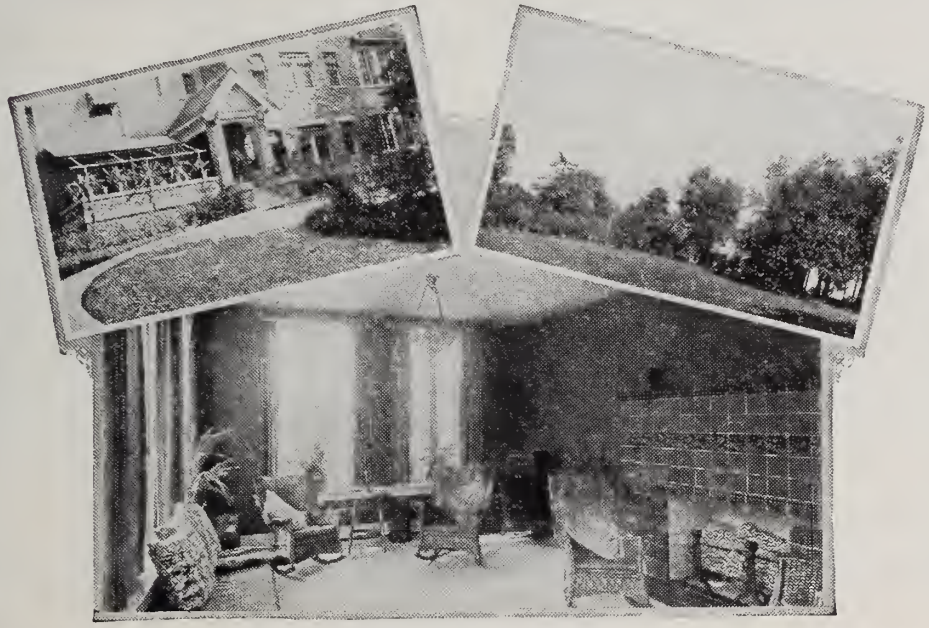
A PRIVATE NEUROPSYCHIATRIC HOSPITAL, modern in all particulars. Ideal location at the east edge of Columbus. Specialists services, laboratory facilities and well trained nurses. Fifty individual rooms. Patients taken for observation. Phone or write for information. ALCOHOLISM GIVEN SPECIAL ATTENTION.

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F. W. Langdon, M.D. ..... Visiting Consultant
Robert Ingram, M.D. ..... Visiting Consultant
Emerson A. North, M.D. ..... Visiting Consultant
D. A. Johnston, M.D. ..... Medical Director
H. P. Collins ..... Business Manager
Box No. 4, College Hill, Cincinnati, Ohio



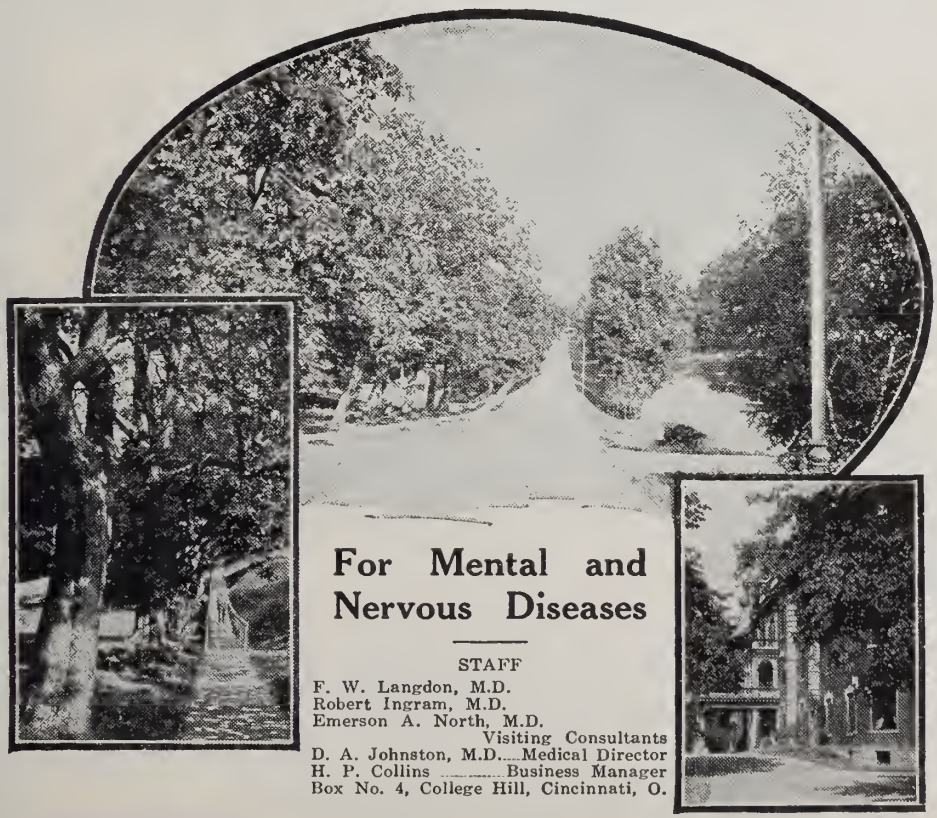
For purely nervous cases, nutritional errors and convalescents.

Completely equipped for hydrotherapy, massages, etc.

Cuisine to meet individual needs.

THE CINCINNATI SANITARIUM

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A strictly modern hospital fully equipped for the scientific treatment of nervous and mental affections. Situation retired and accessible. For details write for descriptive pamphlet.

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A Private Hospital For Mental and Nervous Diseases — Established in 1911

This institution, with its modern facilities, its delightful and restful suburban location, and its well-trained efficient organization, has for 15 years been in a splendid position to render skilled beneficial service at reasonable rates.

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A sanitarium equipped for diagnosis and follow-up in convalescent cases.

Physical therapy department equipped and staffed by trained technicians for treatment of such Orthopedic conditions as Torticollis, Congenital or acquired Postural changes, Arthritis, anterior Poliomyelitis, Neuritis and allied Bone and Joint conditions.

We are especially interested in the Anemias, Diabetes and Arthritis.



Write for particulars, or telephone 2650.

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Laboratory and X-Ray investigations under direction of Physicians of known and recognized ability.

Food preparations under direction of graduate dietitian. Dining-room and tray service. Milk and cream from our own herd of registered tuberculin tested Jerseys.

Mental cases and drug addicts not admitted.

Located high on the edge of Washington, thirty miles south of Pittsburgh.



THE OXFORD RETREAT
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Nervous
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Mild Mental Cases

R. HARVEY COOK,
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Write for Descriptive Circular

New Fire Proof Bldg. Opened June 1926



WHITING MINERAL SPRINGS
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Hydrotherapy scientifically applied for the treatment of rheumatism and allied diseases together with cases for elimination and rest cure.

Medical department thoroughly proficient and STRICTLY ethical.

First class and modern in every department with moderate rates.

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For Nervous and Mild Mental Disorders. Located at Mercer, Pa., 30 miles from Youngstown. Farm of 75 acres with registered tuberculin-tested herd. Re-educational measures emphasized, especially arts and crafts and outdoor pursuits. Modern laboratory facilities.

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THE COLUMBUS RURAL REST HOME

AT WORTHINGTON, OHIO—JUST NORTH OF COLUMBUS



One of The Cottages—Forty-five Acres of Woods and Lawn

NERVOUS AND MILD AFFECTIVE DISORDERS

A Secluded Spot for Rest and Treatment. Good Accommodations—Kind and Efficient Nursing. Medical—Physical—Psychotherapeutic Measures.

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Especial feature of treatment

INDIVIDUAL CARE

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Equipment—modern; **Location**—accessible.
Grounds—a park of 25 acres, well wooded and retired
Descriptive Circular on request.



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MENTAL AND NERVOUS DISEASES, ALCOHOLISM, DRUG ADDICTION AND GENERAL INVALIDISM

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A PRIVATE SANATORIUM WITH HOSPITAL FACILITIES



A quarter century of efficient operation

Rates $25.00 Per Week and Up

Alcoholic treatment destroys the craving for alcohol, restores the appetite and sleep, and builds the patient up physically and mentally. Whiskey withdrawn gradually. Not limited to one pint of whiskey in ten days.

Nervous patients are accepted by us for observation and diagnosis as well as treatment.

Drug treatment is one of Gradual Reduction. It relieves the constipation, restores the appetite and sleep. Withdrawal pains absent. No hyoscine or rapid withdrawal methods used unless the patient desires same.

Mild mental cases have every comfort that their own home affords.

Cherokee Road (Long Dist. Phone East 1488)

DR. STOKES' SANATORIUM LOUISVILLE, KENTUCKY.

Situated in the choice highland section of Louisville, just 20 minutes' ride from all railroad stations

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Require Intensive Scientific Training in a Suitable Environment

The Bancroft School

One of the oldest private boarding schools of its kind in the United States, provides unsurpassed facilities for exceptional children. Winter quarters in New Jersey, summer camp on the coast of Maine. An incorporated educational foundation, operated not for profit, controlled by a Board of Trustees, offering the highest type of education attainable at rates within the reach of all. Organized to give the fullest possible cooperation to physicians.

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"MESCO" Laboratories

The "MESCO" Laboratories manufacture the largest line of Ointments in the world. Sixty different kinds. We are originators of the Professional Package. Specify "MESCO" when prescribing Ointments. Send for lists.

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Magnesium Hydroxide Now in Palatable Wafers

Chewed and mixed with saliva, these wafers readily form a "Cream of Magnesia"—soft, bland and free from grittiness. Very palatable, too, and uniformly stable.

Plant's TRADE MARK $Mg(OH)_2$ MAGNESIA WAFERS

℞ Each wafer the equivalent of one teaspoonful of Milk of Magnesia U.S.P.

PEDIATRICIANS prize them because of accurate dosage—each wafer equals 1 teaspoonful of *Milk of Magnesia* U. S. P. Particularly efficient in cyclic vomiting.

OBSTETRICIANS find them very valuable for Nausea of early pregnancy and for first postpartem cathartic.
Recommended wherever milk of magnesia is prescribed. Professional Supply gladly sent gratis. Kindly mention druggist's name when replying.

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Windsor Hospital

THE Windsor Hospital and Sanitarium is completely equipped with all the best apparatus for giving Hydrotherapy, Occupational Therapy, and other treatment for all types of Nervous diseases, acute and chronic.

Special rates given to patients remaining more than one month.

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Feeding the BABY!



Wilson's Unsweetened Evaporated Milk is an ideal base with which to start in making up your infant feeding formulas, because

1. It is packed under U. S. Government Standard.
2. It maintains a constancy of composition.
3. The fat globules are broken up and are easily digested.
4. It contains all vitamins, which milk can be depended upon to supply.
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More detailed information and samples of Wilson's Milk will be sent to physicians upon their request.

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GASTRON

The Entire Soluble Constituents of the fresh gastric mucosa, including the pyloric

The amino acids, colloidal proteins, known activated enzymes, associated nitrogenous extractives, organic and inorganic cell principles—these are all contained in Gastron.

GASTRON is an aqueous-acid-glycerin extract, 0.25% HCl.

It is significant of the degree in which Gastron represents a gastric-gland concentrate that 1. C.C is capable of converting 200 grams of coagulated egg albumen under the official test; the high protein content is shown by the copious precipitate with strong alcohol, ammonium sulphate, etc.

GASTRON, the true stomach-gland extract, gland tissue juice of constantly increasing repute in symptoms and disturbances with attribution of gastric deficiency.

GASTRON is agreeable and stomachic.

Fairchild Bros. & Foster

NEW YORK

Makers of original products suggested by the progress of science in medicine.

PUBLIC HEALTH — SOCIAL WELFARE MEDICAL ECONOMICS and ORGANIZATION PROBLEMS

With Editorial Comment by D.K.M.

Teamwork directed by able leadership is essential in the success of group activities.

Organization, which is group teamwork, has invaded practically every field of endeavor and has played an active and prominent part in the economic, social and governmental development of the nation.

Preparation for the Coming Year

The medical profession was one of the pioneers in this modern program of organized effort. It has for decades realized the value of and utilized united and organized activity in advancing the cause of scientific medicine and public health; in developing an efficient service of incalculable benefit to the public, and in carrying out programs for the good of the profession, individually and collectively.

Following the path blazed by the medical profession, business, industry and other professions and vocations have coordinated their forces into state-wide and nation-wide organizations and groups. United effort in the solution of mutual problems has been found indispensable in the complexities of the present age. Teamwork has become the keynote of modern economic and social activities.

Medical organization in Ohio is completing another year of activity in the interest of the public and the members of the Ohio State Medical Association.

The membership may be justly proud of the accomplishments and achievements of the State Association during the past twelve months. Teamwork under able leadership has enabled organized medicine to finish the year with a splendid record of substantial and tangible achievements.

Cooperation of the membership with the officers, councilors and committees of the State Association has resulted in genuine accomplishments, demonstrating that organized medicine in Ohio is consistently a constructive and progressive professional group with unselfish aims and lofty ideals and is always ready, willing and anxious to battle for or against, as the case may be, those things which it knows to be good or bad for the people, beneficial or detrimental to the reputable medical practitioner.

Many difficult and complex problems have been met and solved during the past year. Others are at present awaiting solution. Still others undoubtedly will arise, especially during the coming session of the State Legislature which will convene in January.

Results of the ensuing year will depend largely on how well and how efficiently medical organization functions. This of course depends on the activity and interest of individual members of the county medical societies and the State Association. Unity and harmony must prevail to make organized medicine sufficiently strong to meet all problems and questions in a manner satisfactory to the public interest and that of the medical profession.

Members of the State Association who have not already done so are respectfully urged to study and analyze the earnest and frank discussion of some of the important angles of medical organization presented by Dr. C. W. Waggoner, Toledo, president of the State Association, in his "President's Page" article in the November issue of *The Journal.* The attention of the members also is called to Dr. Waggoner's personal message to the membership found elsewhere in this issue of *The Journal.*

"SUBSCRIPTIONS EXPIRE"

Also Membership Dues

The envelope containing this issue of your *Journal* bears the admonition "Annual Subscriptions Expire With This Issue". Subscription to *The Journal* is included in your annual dues to the Ohio State Medical Association.

Dues are payable in advance for the calendar year. Dues should be remitted *now* to the secretary-treasurer of your County Medical Society in order that the proportion of annual State Association dues may be transmitted by him *before* January 1.

Postal regulations permit the subscription announcement to be carried on the *Journal* envelope, but do not permit reference to the "annual dues"; hence the wording as it appears. Annual dues in the State Association for 1931 paid and transmitted *before* the first of the year, means continuous good standing in medical organization; continuous receipt of *The Journal;* and material assistance to your local and state officers and committees.

In these discussions, the President has gone into some of the important phases of organization activities and in an emphatic manner has pointed out the coordination, cooperation, unity, harmony, interest, activity and efficiency that must be present to make the Ohio State Medical Association strong and powerful enough to discharge the obligations that it owes to the public and its physician members.

As Dr. Waggoner has pointed out, it is important that every eligible and qualified physician in the state should become a member of organized medicine. To re-emphasize a few of the reasons he offers why a physician should be a member of his county medical society and the State Association, membership in the State Association:

1. Is an assurance of the physician's standing in his community, before the public, the law and the profession.

2. Helps to maintain organization machinery for the service of the members—in other words, a central clearing house of valuable information.

3. Makes possible the publication of the *Ohio State Medical Journal* which is a consecutive record of scientific, economic, social, legal and legislative developments of direct interest to every practitioner.

4. Provides the means for contact with numerous state and federal departments and for impressing on the executive, judicial and legislative branches of the government the concerted medical viewpoint.

5. Provides the means for cooperation with other statewide and national groups and organizations interested in common problems of public health and professional practice.

6. Affords protection against unwarranted malpractice suits—a service which makes unpopular all sorts of attempts to swindle physicians.

7. Makes possible the maintenance of Association bureaus, departmental and committee activities for the benefit of all.

9. Affords a unanimity of effort in all endeavors, and more especially, presents a united front against the proponents of paternalism, state medicine, radicalism and cultism.

In preparation for the new year, the first step which each member should take, if he has not already done so, is to transmit his 1931 dues to the secretary-treasurer of his county medical society or academy of medicine *at once.* Continuous "good standing" is contingent on receipt of 1931 State Association dues at the State headquarters *before* the beginning of the New Year.

Organized medicine in Ohio will need to be recruited to its fullest strength to meet and solve the vital and crucial questions destined to arise during the coming twelve months. Medical organization must be, in the words of the essayist, "the connection of parts in and for a whole so that each part is, at once, end and means".

Public Health Work in Ohio

At the annual conference of Ohio health commissioners with the State Department of Health, held in Columbus the third week in November, questions and problems relative to public health work in Ohio were discussed and the official health work being carried on in the state appraised.

Ohio ranks high among the various states in its organized, official public health activities.

Eighty-six of the 88 counties of the state have full or part-time public health services.

Forty-four counties have full-time services. Seventeen cities have full-time services, combined with county service and 18 cities have full-time services, exclusive of county service.

All of the 86 county or joint county-city health commissioners of Ohio are physicians.

However, of the 75 cities of the state having health services independent of county services, 21 employ health commissioners who are not physicians.

This presents an anomalous situation and one which reveals a weakness in the present system of official public health work in Ohio.

It must be admitted that some good public health work may be carried on in some cities by commissioners who are not physicians and who have little or no knowledge of the medical sciences. On the other hand public health work in other cities has been decidedly inefficient, due, no doubt, to the fact that the director of the service is lacking not only in executive ability but also in knowledge of the fundamental sciences which play a principal role in curative and preventive medicine.

"Health work is primarily and fundamentally attached to medicine in all of its many branches", writes Dr. J. C. Geiger, professor of epidemiology, University of California, in a recent article in the *American Journal of Public Health.*

"That to be a good health officer one must be a graduate physician," continues Dr. Geiger, "is certainly not an infallible rule. Some of our excellent health officers and teachers of public health are not physicians, yet this handicap must be fully admitted when put to actual practice by the necessary contact with medicine. * * * Certainly, a person classified as a public health administrator without some definite medical training is like a ship without a rudder; yet, it is not unlikely that a person so void of such training will often write of the epidemiology, prevention, and even the curative aspects of disease. By analogy, obstetrics could just as well be written by an engineer."

Dr. Geiger also has a word of comment on the advisability and necessity for trained personnel in the health department, exclusive of the director, another problem which prominently enters the public health field. He writes:

"The health official must realize no matter how thorough his training and how broad his knowledge, that he should surround himself with the best of assistants, equally well trained, equally well paid, and equally sharing in the published data. The establishment of advisory councils drawn from universities, medical societies and social agencies appears to be not only necessary but fundamental. Unfortunately, this measure is often regarded with suspicion by politically minded and narrow visioned health officials. Many wholly untrained persons occupy front line positions in public health in the United States, and the trained must depend on a secured solidarity of public opinion based on the education of the community and the medical profession to the necessity of having trained health workers."

The questions raised should be thought-provoking to those Ohio cities who are permitting their public health work to be run in a slip-shod fashion by inadequately trained persons. The counties of the state have taken a forward step in solving this problem by permitting, under the legal requirement, only those with a knowledge of disease and the medical sciences to run their public health affairs.

The Same Old Story of Taxes

Taxation questions will occupy the spotlight at the coming session of the State Legislature.

Finding new sources of revenue will be one of the confusing problems calling for a solution. Curtailment of certain phases of the state government may be found necessary to bring the state's budget within the reach of the estimated revenues.

At any rate, one of the chief tasks of the Legislature will be to avoid enacting foolish laws, setting up needless and expensive bureaus, requiring state funds and more money from the pockets of the taxpayers.

There are a thousand and one interesting angles to the question of taxation.

One of the most refreshing comments on the whole question and one full to the brim with old-fashion, common horse sense was that made not so long ago by Merle Thorpe, editor of *Nation's Business*, in the columns of that publication, as follows:

"Speaking of taxes—and who is not?—the tax collector now demands from each of us one day's labor out of each week. All of us, men, women and children, earn yearly around 80 billion dollars. Our tax bill is nearly 13 billion—one-sixth of our total earning capacity.

"Look at taxes in another way: One person out of 11 who are gainfully employed is a public employee. Not so long ago we required only one person out of each 22 to perform the services which we demanded of government. A few more of our demands and it will be one out of ten; then one out of nine, and so and on. When will we stop saying: 'The Government ought to do this, and that, and the other thing'.

"Most people think the corporations and the rich pay the taxes. This fallacy, more than any other single thing, is responsible for our increasing tax burden. * * *

"Another fallacy is that everything from the government is free. Free seeds, it used to be; now free publications, free advice, free help, free this and that. Such a ghastly joke! There is no such thing as free government, any more than there is free rent, free clothing, or free groceries. Government costs real money. Every self-supporting citizen shares his income with the million-odd men and women now on government pay rolls. * * *

"Taxes are hidden in everything we buy. The landlord passes on part of his taxes in the bill for our rent; the baker wraps them up with the bread he sells us. The insurance company includes them in its premiums. Bills from butcher and milkman include a tax as surely as if the postman brought a notice from the tax office.

"Business is interested in reducing taxes, not alone selfishly, because business, after all, simply collects taxes from the consumers of things. Business sees money wasted which might be used by individuals to get those things which would give greater happiness and contentment—house furnishings, or a trip to Europe, new carpet sweeper, or a set of books. Business sees clearly that it is the consumer of things who pays, and because that consumer does not know that he pays, that he is apt to advocate and urge an expenditure which he would never favor if he knew that it was to be paid out of his pocket.

"When the individual understands clearly that he pays the bill, he will consider more carefully increased government appropriations and services. If each man who signs a petition or writes a letter to a congressman or state legislator, urging a public expenditure, were required by law to enclose his check for his part of the expense, there would be a sharp scrutiny of such proposed activities."

Professions Can Be Overcrowded

Painful experiences of the legal profession resulting from its enormous, but rather unhealthful, growth in personnel during the past few decades should act as a silencer on those who are constantly hammering for an increase in the supply of physicians and "more opportunities" for those desiring to enter the medical profession.

A bulletin recently issued by the Section of

Legal Education of the American Bar Association views the increasing number of law students as a cause for anxiety rather than congratulation.

Statistics accompanying the report reveal that in the past four decades, the number of law schools has increased from 61 to 173 and that the number of law students has jumped from 4,486 to 47,415.

The bulletin expresses the fear that "the profession cannot absorb into the better side of its life so many new members" and that "commercialism is likely to crush out the professional character of the calling".

Higher educational requirements for admission to the bar is regarded by the group as the most hopeful solution to the problem.

The high standards which have been established by medical institutions and by state medical boards have accomplished just what the legal profession hopes to bring about through its contemplated efforts.

Concerning Hospital Costs

Recent magazine criticism of hospitals, charging those institutions are demanding exorbitant fees and thus contributing largely to the so-called high cost of illness, has brought forth some interesting replies in defense of hospitals from some of those who have made a study of the field and its many problems.

One of the recent articles written from the standpoint of the hospitals is that contributed to *Modern Hospital* by Dr. Donald M. Morrill, director of the Blodgett Memorial Hospital, Grand Rapids, Michigan.

Dr. Morrill does not defend the modern hospital system in its entirety. He admits that the hospital system has faults which must be corrected. However, he believes that much of the criticism directed at these institutions is fallacious and shows a lack of understanding of the hospital field.

In answering those who have been prone to compare hospital service and costs with hotel service and costs, Dr. Morrill says:

"A fundamental error of the commentator is his failure to recognize the important element of responsibility. A person goes to a hotel voluntarily seeking lodging and other services, agreeing to pay cost, and expecting to pay a profit, and retaining full personal discretion. The patient who knows, or who believes he knows, more about his illness than the physician might wish to maintain the same status in a hospital. All others, however, admit that they are not able to care for their own illness. They come seeking the help of the doctor, the nurse, the technical staff.

"Fulfillment of this responsibility requires that we must look out for the welfare of each patient. Certain rules become necessary, the reason for which may not be always clear. This element of responsibility must not be used as a cloak for unnecessary high-handed and arbitrary action, to be sure, but a full realization of its existence by the patient, or more often, by the friends or the family of the patient would remove the foundation from a great deal of hasty criticism.

"Critics of the hospital frequently complain in one breath of the cost of hospital care, and in the next breath they demand refinements of service that would triple the cost. Our aim should be to provide for the need of each, and to add as much in the way of increased comfort and happiness as financial and other limitations will permit."

Dr. Morrill quotes from several competent and well known authorities relative to the costs of hospitalization. One of these authorities, he says, declares that rates are not out of proportion to costs, that costs have advanced less than the average advances in commodity costs since 1913 and that hospitals in this country are not mismanaged from the operating standpoint. Another makes the statement that *the American public can afford to pay more for health than it is now paying.*

"It is time that we all gave serious thought to a critical analysis of the economic fundamentals of our hospital work", writes Dr. Morrill in commenting on some of the faults in the hospital business.

"Frankly", he says, "We do not know our capital investments and capital costs, we have developed no rational and universally applicable principles of cost-accounting and rate-making, and we have almost no unit of direct financial comparison, one hospital with another.

"When we have finished such an analysis, we shall discover these three things: (1) We are giving too much service totally free; (2) we are charging the ward patient too little, and, (3) we are charging the moderate-price, private-room patient and the semiprivate patient too much."

In answer to those who contend that persons of the middle-class are being charged fees far in excess of their ability to pay, Dr. Morrill makes this pertinent comment:

"The plight of the so-called middle-class patient is to a high degree self-imposed. When illness was largely confined to home care, this patient ordered his expenditures more nearly in accordance with his means. He does not now want 'middle-class' service. He wants the most expensive type, at a reduced rate. We do not object to his purchase 'from earnings' of his automobile, his electric refrigerator, his oil-burning furnace, and his radio if he has a savings account ample to provide against illness, which is bound to strike some member of the average family every year."

The Choice of Anesthetics with Particular Reference to the Protection of the Patient.

HUGH CABOT, M.D., Rochester, Minn., and HOWARD LAMB, A.B., Ann Arbor, Michigan

IF one consults the literature associated with the introduction of ether anesthesia, it will be noted that the word "anesthesia" was coined by the late Oliver Wendell Holmes. With his happy facility of combining Greek words to express his meaning, he made the word anesthesia to cover the intentional production of insensibility to pain. All of the earlier anesthetics not only produced insensibility to pain but unconsciousness. Modern anesthesia, however, covers a far broader field and the word must have a broader meaning. I suggest that the purposes of anesthesia are first and most importantly, the complete protection of the patient from insult inevitable in surgical operations, and second, the assistance given to the surgeon by relieving him of the necessity of great speed and allowing him to deal with a quiet patient. It will of course be understood that the prime intent is the protection of the patient to which all else is secondary.

Now the protection of the patient must, as I think, include protection against insults of all avoidable kinds and is therefore of two types. We must supply by anesthesia not only protection against physical insult in the form of pain production, but also protection against emotional insult, a protection inherent in the earlier forms of anesthesia but by no means inherent in a wide range of methods used in the production of modern anesthesia. The protection against pain has been the obvious requirement and the one upon which the most attention has been focused. The protection against emotional insult has been considerably less obvious and has often been overlooked. However, I believe that such protection is becoming increasingly important, partly because the field of surgery has been enormously widened and now includes a tremendous number of operations of election never contemplated when anesthesia was first introduced.

Another aspect of this question which seems to me important is our increasing susceptibility to emotional insult. At least a good case could be made for the proposition that, perhaps on account of the increasing pace and complexity of modern civilization, the emotional balance of an increasingly large number of individuals is becoming delicate and the proportion of those with varying degrees of emotional instability is far larger than at an earlier day and is steadily increasing. If this argument has any sound basis in demonstrated fact, it introduces a very important element into the decisions forced upon the surgeon in his choice of a method of anesthesia. That the surgeon has not been very sensitive to this aspect of the situation, will, I think be admitted. There is, for instance, considerable evidence to show that an appalling number of surgical operations, chiefly abdominal, commonly done upon women, are not only without satisfactory results, but being done without any clear indication, cause grave insult to a highly unstable individual whose symptoms have been of functional rather than organic origin and who are left by an unnecessary operation, very definitely worse off than they were before.

Without at this time discussing this particular question, I believe it supplies evidence of the fact that it behooves those who are charged with the carrying out of surgical operations, to consider carefully the protection of the patient not only against ill-advised surgery but against unnecessary insult as the result of indicated surgery.

REQUIREMENTS OF A SATISFACTORY ANESTHETIC

I submit the proposition that a satisfactory anesthetic must among other things, protect against pain and against fear. All efficient anesthetics protect against pain and no anesthetic which does not do so is tolerated. Fear therefore becomes an important element in choice and it is not always remembered that the patient and not the surgeon must be the chief consideration in the selection of an anesthetic. Fear is probably present in the overwhelming majority of patients before the administration of all anesthetics. It disappears with the administration of a general anesthetic, but may be present at all times during any anesthesia which does not produce unconsciousness.

Though it does not immediately concern the subject under discussion, I suggest that the prevention of fear before surgical operations is no small consideration and has been neglected. Fear during any form of anesthesia not accompanied by unconsciousness is therefore a handicap which these methods must take on and which must produce an element militating against their selection in the absence of positive indication.

PRINCIPLES OF CHOICE OF ANESTHETICS

An outstandng requirement and one which probably has never been seriously lost sight of, is safety. On the whole, a very high degree of safety has been achieved but any careful study of the alleged safety of anesthetics will reveal the very great difficulties involved in any accurate determination of the facts. If by safety we mean the extent to which the patient is placed in jeopardy of his life solely on account of the anesthetic, and include in this not only those

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situations in which life is in jeopardy during the period of anesthesia, but also those conditions inherent in the anesthetic which tend to continue the jeopardy for a period after operation, then we shall find the gravest difficulties in getting any accurate picture of the facts. In the first place, it is difficult to say with certainty that a given death taking place during a surgical operation was in fact due to the anesthetic and not to some condition inherent in the patient or incident to the operation itself. Furthermore, there are a considerable number of instances in which death takes place days or even weeks after operation from conditions which may or may not have been caused by the anesthetic. The outstanding instances are those of postoperative lung complications in which the precise role of the anesthetic may be difficult of evaluation. Finally, anesthetic deaths are sufficiently uncommon so that they are commonly not reported and the literature contains little accurate evidence of the precise situation.

The second principle in the choice of anesthetics is that the anesthetic should be relatively certain to produce the desired effect. Certainty is relatively inherent in the general anesthetics but by no means inherent in the case of local, regional, sacral or spinal anesthesia, in all of which partial or complete failure of anesthesia will occasionally occur.

The third great principle appears to me to be that the anesthetic should protect the patient as far as possible against fear and other forms of emotional insult, a principle not sufficiently generally considered.

From this bald statement of the principles involved, it will at once appear that there is no single method of anesthesia which will fulfill these requirements as far as they can be fulfilled on all occasions.

THE FIELD OF CHOICE OF ANESTHETICS

The methods of anesthesia which are now available are so many and so complicated that a pretty thorough knowledge of many should be required of the surgeon who proposes to do his full duty to his patient. I believe I am on safe ground in stating dogmatically that there is no one form or method of anesthesia which nearly or satisfactorily fulfills all essential requirements. We must thus briefly review several at least of the various candidates for approval.

The old standbys are ether and chloroform, longest in the field and eminently respectable, if for no other reason because of their antiquity. Ether has been generally accredited with being safe, a reputation which I think is not entirely deserved. It is true that it is remarkably difficult to kill a patient with ether during the operation, a statement eminently justified in view of the many unsuccessful attempts made by utterly ignorant would-be anesthetists in the days before anesthesia had developed to its present high state of excellence. But the mere fact that ether does not destroy the patient suddenly, immediately and permanently, is no argument for its safety and I continue to believe, in spite of many protests to the contrary, that ether indirectly destroys as many if not more lives than any other anesthetic in common use. I freely admit that the case for this statement is difficult to prove. It is based upon my belief that postoperative pulmonary complications, probably chiefly based upon varying degrees of atelectasis are importantly more common where ether is used than in any other single form of anesthesia. Whereas ether is normally credited with a mortality of only one in several thousand, I shrewdly suspect that the facts would place the risk importantly below one in one thousand. Add to this the fact that ether, no matter how skillfully given, is disagreeable, and that it tends to the production of excessive mucus which handicaps the anesthetist and its much vaunted safety and ease of administration become severely damaged.

Choroform has had a bad name in this country, chiefly due to its habit of destroying patients with tragic suddenness, commonly enough during trivial operations. I suspect however, that were it possible to assort the blame as between ether and chloroform, that the much advertised safety of ether could not be shown to be importantly greater than that of chloroform. In minor particulars, chloroform is less objectionable than ether. It is less disagreeable to take, does not irritate the air passages and has no outstanding objections not attributable to ether except the occasional production of degenerative changes in the liver which may lead to late fatalities. In general, I incline to classify ether and chloroform together and to deny to either of them the outstanding preeminence that they have long enpoyed.

Nitrous Oxide and Oxygen—Of the gaseous anesthetics, nitrous oxide has been longest in the field but has never succeeded in making for itself a thoroughly satisfactory reputation. It has outstanding advantage over ether in that the production of unconsciousness is rapid and not unpleasant, but it has never been granted a very high grade bill of safety in the opinion of those really authorized to express an opinion. Its early reputation for safety was based on the production of almost momentary anesthesia for the extraction of teeth, a method of little or no value in surgery and consequently hardly coming into the picture. The safety of nitrous oxide must stand or fall by the results of its administration in operations lasting at least 30 minutes and in this group it has yet to be shown that it can command our respect on the ground of great safety. Deprivation of normal amounts of oxygen is inherent in this anesthetic and high degrees of muscular relaxation can as a rule not be obtained

except by depriving the patient of oxygen which he needs in his business. In a word, a certain amount of asphyxiation is inherent and to that extent, dangerous. Furthermore, even in the most skillful hands, it cannot be relied upon to produce the degree of muscular relaxation which is highly desired by the surgeon in abdominal surgery in general, and the surgery of the upper abdomen in particular.

Ethylene. Of the gases, ethylene is one of the newest candidates for favor and has much to recommend it. It is a better anesthetic than nitrous oxide and oxygen for not only can a satisfactory depth of anesthesia be maintained while allowing the patient a sufficient supply of oxygen, but the amount of relaxation obtained though inferior to that which may be had with ether or chloroform, is still far superior to nitrous oxide and is in the majority of cases, satisfactory. It has the advantages of all gaseous anesthetics in that induction is rapid, return of consciousness rapid and complicating nausea and vomiting much less than with ether. Its administration is followed by a remarkably low incidence of post-anesthetic pulmonary complications, and finally it is remarkably free from danger. This statement is made with entire recognition of the fact that ethylene has received a serious black eye on account of a small number of fatalities due to explosion. Since, however, this is apparently about the only risk from ethylene and since there is reason to believe that these incidents have been reported in a very high percentage of cases, we are driven to the conclusion that the actual mortality from ethylene is enormously less than any other general anesthetic in common use. Furthermore, I believe that the danger from explosions can be entirely eliminated by proper modifications of the anesthetic apparatus and proper precautions against electric sparks and open flame in the neighborhood.

Amytal and Avertin. Though the time has not arrived when one can make a safe and satisfactory appraisal of the anesthesia which may be obtained by the use of these drugs, the former preferably intravenously, the latter by rectum, experience of their use is sufficiently large to require some mention of their advantages. In theory at least, a method of anesthesia which avoids using the respiratory tract as an accessory during and after the fact has notable advantages. In the past, the lung has suffered, so to speak, as an innocent bystander from its utilization as a method of introducing anesthetic substances into the circulation. If and when methods of introducing the anesthetic into the circulation by other routes and preferably directly into the circulation, have been satisfactorily worked out, the method bids fair to command wide aceptance.

My experience to the present time with amytal warrants the suggestion that it has added importantly to available methods of anesthesia. With a small experience of only about 200 cases, we have found that in something like half of the cases, and particularly those which did not involve opening the peritoneal cavity, entirely satisfactory anesthesia can be obtained without any additional assistance. In the balance of the cases, the addition of very small amounts of nitrous oxide and oxygen has given entire satisfaction and the amount of these gases employed has been far below that necessary to produce anesthesia unassisted and brings them, I believe, within the zone of almost complete anesthetic safety. The combination therefore of amytal with small amounts of nitrous oxide and oxygen when necessary has been shown to be an anesthetic method which deserves further and serious consideration.

Our experience with Avertin has been too small to warrant an opinion but there is evidence to show that it is a desirable addition to anesthetic methods.

LOCAL, REGIONAL AND SPINAL ANESTHESIA

The field of local anesthesia using the word in a strict sense, is necessarily rather narrow though it may be admitted that it can be used for pretty extensive operative procedures. In a narrow field where the operative procedures are not serious or extensive, where the element of protection of the patient against fear is at a minimum, it is an excellent method and one with which all surgeons should be familiar.

Regional anesthesia is a much more pretentious method and one which skillfully employed, can furnish wholly satisfactory anesthesia over a very large field. It is open to the objection that except in the hands of an expert, it is somewhat unreliable, gross failures of anesthesia being not uncommon. It is also open to the objection common to all anesthetics which do not of themselves produce unconsciousness, that it fails to protect the patient against emotional insult. I am therefore driven to the conclusion that its use should be confined to those situations in which all forms of general anesthesia are contra-indicated and in which it can be employed by a thoroughly trained expert.

Spinal Anesthesia. This method has had a long and devious history, having fallen into disrepute because of its undoubted risk, having returned to favor when these risks had been very considerably diminished and now occupying the position in which very complete and satisfactory anesthesia from the point of view of the surgeon can be obtained at a risk which probably does not exceed that of ether or nitrous oxide. It supplies the surgeon with muscular relaxation superior to that of any other method but it totally fails to protect the patient against emotional insult. That it has a very definite field of usefulness should be at once admitted; that it is entitled to displace

general anesthetics except where these are positively contra-indicated, is by no means clear. The greatest objection to its use is its facility of production of beautiful relaxation which tends to blind the surgeon to what appears to me to be a very important duty of protecting the patient from insult other than that of pain. For the surgeon, it is eminently satisfactory; for the patient in many instances I believe it is not.

POSTOPERATIVE PULMONARY COMPLICATIONS

While this is a field so large and so interesting as to warrant entirely separate consideration, it appears to me that no discussion of the choice of anesthetics is reasonably complete without some mention of the subject. It may fairly be doubted whether the medical profession is sufficiently familiar with the frequency of these complications and sufficiently aware of their importance. Mandl[1] in a study of 1300 cases found these complications in 2.7 per cent of operations involving the extremities, head, mouth, and neck. He found them present in 10.5 per cent of operations involving the upper abdomen. Elwyn[2,3] found them present in .7 per cent of operations upon the extremities, head, mouth, and neck; in 6.27 per cent of operations upon the abdomen and 13.8 per cent of operations upon the stomach. Cutler[4,5,6] found them present in 1.12 per cent of operations outside of the abdomen, 4.48 per cent of operations in the lower abdomen, and 7 to 8 per cent of operations upon the upper abdomen.

Although it is true that no method of anesthesia whether general, regional or spinal, shows absence of these complications and while it is certainly true that it is not wholly the anesthetic but very importantly the operation and its effects upon the patient which produce these complications, it is yet true that there is an important difference in the frequency of pulmonary complications under different forms of anesthesia. I have thought it worth while to study two small groups of my own patients, one operated upon under ethylene anesthesia and one operated upon under ether anesthesia. Ninety-six consecutive abdominal operations performed under ethylene in a few of which some ether vapor was introduced, show 4 per cent plus of pulmonary complications. Of the four patients in this list who showed any evidence of such complications, two occurred in fourteen operations on the upper abdomen, in both of which ether vapor was combined with ethylene. Of the remaining two, out of 82 operations upon the lower abdomen, one was very doubtful, consisting only in the appearance of a few transient rales at the base of one lung and in neither of them was ether vapor employed. In 93 consecutive laparotomies done under ether anesthesia lung complications appeared in fourteen cases or 15 per cent plus. Of these, seven occurred in 24 operations in the upper abdomen, or 29 per cent plus, while the remaining seven occurred in 69 operations in the lower abdomen or 10 per cent plus. From this it at once appears that as far as this small series of cases is entitled to serious consideration, ether comes off very badly in its liability to be followed by Irish dividends above the diaphragm.

These figures constitute a grave indictment of anesthetic methods and warrant the conclusion that lung complications are a very important factor in postoperative morbidity and also mortality. Modern study strongly suggests that varying degrees of pulmonary atelectasis are the most important element in the production of these complications and the situation is clearly stated in a recent very excellent communication by Coryllos[11]. The work of Henderson[7], and Henderson and Haggard[8,9,10] clearly shows that the appropriate use of carbon dioxide will very importantly diminish the incidence of atelectasis and is therefore an essential adjunct to any form of inhalation, regional or spinal anesthesia which undertakes to be skillfully administered.

THE CHOICE OF AN ANESTHETIC

From this cursory survey it will appear that all of the methods above described have a field of usefulness. Inhalation anesthesia has the outstanding advantage of protecting the patient both against pain and fear, and is therefore, I believe, generally to be preferred. The case for ether anesthesia is not good. It should no longer be regarded as a safe anesthetic. Its entirely satisfactory administration is not simple; it must always be followed by the skillful administration of carbon dioxide and even at that will, I believe, show a higher incidence of postoperative pulmonary complications than other anesthetics. It is my best guess that ether will lose ground as the anesthetic of choice.

For the gases, a better case can be made than for ether and of them I believe that ethylene is the best. They should be used as a rule, unless contra-indicated and in the present state of our knowledge, I think that their field of usefulness has been importantly improved by the introduction of amytal. The chief contra-indication to their use is the presence of pulmonary and some types of cardiovascular lesions. There will also be a certain number of patients in whom the fear of losing consciousness is greater than the fear of the operation and their wishes in this regard should, I believe, be respected. Local anesthesia in its rather narrow field has an unchallenged position. The field for regional anesthesia is somewhat circumscribed since it is not entirely certain to produce the desired result and inevitably subjects the patient to emotional insult. Spinal anesthesia is more certain than regional. It has no advantage over regional in protecting the patient, though as an assistant to the surgeon it is unequalled. Both of these methods have a considerable field in the presence of absolute or

relative contra-indications to the general anesthetics. They are methods which should be available at the hands of any surgeon who desires to do full justice to his patient.

FUTURE DEVELOPMENTS

It seems to me quite clear that the ideal anesthetic has yet to be discovered. It is my best guess that anesthetics involving inhalation will have some difficulty in holding their present position, chiefly on the ground that they abuse the lung which is in no way a necessary party to the dog fight. The introduction of amytal suggests a line of future development which may well lead to great improvement. The most outstanding recent contribution to satisfactory anesthesia is that of Henderson and Haggard through their demonstration of the importance of carbon dioxide in diminishing pulmonary complications. Further study of the precise cause of these complications is clearly indicated and if they can be largely diminished, the security of the patient will be greatly improved.

DISCUSSION

E. I. MCKESSON, M.D., Toledo: We have just heard a very excellent and fair exposition of the subject under discussion.

The profession has been and apparently is still seeking an ideal and universal anesthetic to render a standardized service with the least amount of brain power. Such an anesthetic has not been, and probably never will be found. Patients differ and the character of operations vary to such an extent that a method applicable to one might be quite fatal to another.

I want to stress one phase of the paper which I believe will bear considerably more emphasis, namely, mixed anesthesia. It is my belief that modern anesthesia is too broad for any single agent or method. We have passed that stage in its development. We need to use these drugs within their safe dosage and not try to crowd any one beyond its safe and sane limits for the sake of accomplishing some difficult feat.

We have seen chloroform, ether and their mixtures used as universal anesthetics, morphine and hyoscin, nitrous oxid and oxygen, ethylene and oxygen, spinal, sodium amytal and many others have been tried. Any of these, when used alone is neither safe nor desirable as a routine anesthetic. We need to intelligently combine them so as to obtain the particular advantages of each without unreasonable "forcing" of any one to the detriment of the patient.

Hypnotics are very important adjuncts to general anesthetics, but they are not safe when administered to the degree necessary to produce surgical anesthesia. We have tried morphine, Sodium Amytal, Pernocton, etc. Each has a place and as time and experience may prove, one may be more valuable under certain circumstances than another. We have already discovered with many others, that Sodium Amytal in doses sufficiently large to be an anesthetic is not safe and in addition there are too many cases of postoperative psychoses requiring restraint of the patient after its use. It is claimed that Pernocton, as a hypnotic produces less frequent psychoses. Our experience is too limited to say definitely, having had but one case of excitement following its use. One advantage of the barbiturate hynotics over morphine is the less frequent incidence of vomiting from this cause, but if we are to have postoperative excitement requiring restraint, much of their advantage over morphine is lost.

Avertin by rectum may offer some advantages in certain cases, but it again is not suitable for universal use.

Spinal alone falls short of the patient's ideal of modern anesthesia, being uncertain in effect and duration and offering inadequate protection from unpleasant experiences other than pain during the operation. When given in adequate doses, in spite of the use of other drugs to combat it, there is often a dangerous fall of blood pressure, which in itself, is sufficient evidence of the more dangerous character of this form of anesthesia. If the dose might be so regulated as to always avoid unsatisfactory effects of this sort, some of its other disadvantages might be partly offset by combining nitrous oxid-oxygen with it. In many cases, this is being attempted, but the results so far are not altogether gratifying.

One of the difficulties with ether and chloroform is the necessity of over-dosing the patient in order to prevent nausea and vomiting *during* the operation. Ethylene presents this same difficulty but to a far less extent. Ether and chloroform are capable of surgical anesthesia without adjuncts, but they are not as safe on the whole. Ethylene and nitrous oxid are incapable of satisfactory abdominal relaxation in some cases when given *without* such adjunct as hypnotics or supplemented with small doses of the heavier anesthetics.

Atropine is a bad drug to use with morphine prior to most anesthesias. There is even some question of its merits before ether.

Adequate doses of hypnotics to perform their safe functions plus nitrous oxid and oxygen as the general anesthetic, I believe offers the best solution of the anesthetic problem in most cases.

Technique (which is not under discussion) is a most important factor in anesthesia.

BIBLIOGRAPHY

1. Mandl, Felix: Zur statistic der postoperativen lungenkomplikationen und ueber erfolgreiche besterbungen zu deren prophylaxe. Deutsche Ztschr. f. Chir., 1924, clxv, 67; Deutsche Ztschr. f. Chir., 1921, 57; Wien, klin. Wchnschr., 1921, xxxiv, 214.

2. Elwyn, Herman: Postoperative pneumonia. J. Am. M. Ass., 1922, lxxix, 2154.

3. Idem. Postoperative pneumonia. J. Am. M. Ass., 1924, lxxxii, 384.

4. Cutler, E. C., and Hunt, A. M. Postoperative pulmonary complications. Arch. Surg., 1920, i. 114.

5. Idem. Postoperative pulmonary complications. Arch. Lat. Med., 1922, xxix, 449.

6. Cutler, E. C., and Morton, J. T. Postoperative Pulmonary complications. Surg., Gynec., & Obst., 1917, xxv, 621.

7. Henderson, Y. Resuscitation from carbon monoxide asphyxia, from ether or alcohol intoxication and from respiratory failure due to other causes. J. Am. M. Ass., 1924, lxxxiii, 758.

8. Henderson, Y., and Haggard, H. W. Hyperventillation of the lungs as a prophylactic measure for pneumonia. J. Am. M. Ass., 1929, xcii, 434.

9. Idem. The treatment of carbon monoxide asphyxias by means of O_2-CO_2 inhalation. J. Am. M. Ass., 1922, lxxix, 113.

10. Henderson, Y., Haggard, H. W., and Coburn, R. C. Administration of carbon dioxide after anesthesia and operation. J. Am. M. Ass., 1921, lxxvi, 672.

11. Coryllos, Pol N. Postoperative Pulmonary Complications and Bronchial Obstruction; Postoperative Bronchitis, Atelectasis (Apneumatosis), and Pneumonitis, Considered as Phases of the Same Syndrome. Surg., Gyn. & Obst., 1930, L, No. 5, p. 795-827.

The Transitory Type of Diabetes

HENRY J. JOHN, M.D., Cleveland

TO define diabetes positively and unmistakably is possible only in the frank case. The classical picture, as described in various textbooks, is no criterion for its diagnosis. Its absence is not proof that diabetes is not present. As a matter of fact, it is absent in the majority of instances, though the blood sugar may be as high as 400 mg. per 100 c.c. This statement is based on experience in the Cleveland Clinic, where routine blood-sugar examinations are made in all new cases. Frequently an extreme degree of hyperglycemia is found without any signs or symptoms which might suggest diabetes.

Perhaps the most outstanding example of this condition is the case of a fifteen-year-old girl whom I first saw in coma. Her previous history did not give the least hint of a diabetic condition. She had been in perfect health, was very active, and had no symptoms which would point to any abnormality of the carbohydrate metabolism. Yet the disease must have been present in a latent form, suddenly coming into the foreground when the patient developed a mild intestinal influenza which quickly precipitated acidosis and coma.

If a lead may be lacking in such a striking case, a question naturally arises as to the situation at large. Are there cases of diminished carbohydrate tolerance, "prediabetic cases," in which, if untreated, frank diabetes develops sooner or later, or was this case just an unfortunate coincidence?

I am convinced that such things do not just happen, out of a clear sky. Investigation usually reveals the reason for their occurrence to be that we have failed to look into the background and have given an opinion without sufficient basis for it. An opinion is of value only so far as it is based on facts. These facts must be elicited through careful and often painstaking investigation. Just as tuberculosis can be discovered early if negative physical findings are supported by a roentgenogram of the lungs, by observation of the temperature for a few days, by the tuberculin test, etc., so diabetes can be recognized early by means of laboratory investigation. Even though an occasional case might be missed because of insufficient data or misinterpretation of the findings, such cases will be rare in comparison with the cases missed when only routine methods are employed.

Passing from the frank cases of diabetes to the milder forms, the dividing line eventually is reached at which diabetes stops and normal begins. Who today can define this line precisely? Probably no one would venture a categorical opinion; yet all who are working in this field are confronted with borderline cases in which the patient is eager to know his exact status. Naturally, such an opinion cannot be infallible but is purely individual, providing much ground for discussion, since some diagnosticians are more radical and others more liberal. All have the interest of the patient at heart, however, for it is his future which is at stake. If the physician makes a mistake and discharges his patient with the assurance that diabetes is not present, how can he justify himself if a year or two later he is confronted with a full-fledged case of diabetes, and how can he hold his patient's confidence? That is the crux of the problem before us, and it cannot be evaded.

Thus far I have seen a fair number of such patients who have been assured that they were not diabetic and that there was only slight glycosuria at times or an insignificant hyperglycemia. These patients, therefore, remained on a full diet, only to return later as full-fledged diabetics. The majority of their cases were complicated by hyperthyroidism, and concern the surgeon, therefore as well as the internist. Some of them I have reported to call the attention of the profession to the fact that a medical man can protect both himself and his patient by a more guarded prognosis. Again I wish to stress the danger of disregarding a mild hyperglycemia, whether fasting or more than two and a half hours postprandial. Glycosuria, no matter how mild, should not be ignored. Neither of these is normal, though either may be accidental. The physician who does not have the facilities to solve the problem should use

TABLE 1

WOMAN 56, HYPERTHYROID, BLOOD PRESSURE 150/70

Date	Glycosuria	Blood Sugar mg./100 c.c.	BMR	Operations
1929				
Jan. 18	negative			
21	negative			
25	2 plus			
Feb. 4	negative			Ligation
6	negative			Ligation
18	negative			Lobectomy
19	negative			
20	3 plus			Closure
26	negative			
Mar. 5	negative	(Discharged from Hospital on full diet)		
Oct. 4			+50	
Nov. 8			+27	
19		150		
20		126		
27		102		
Dec. 2				Lobectomy
1930				
Mar. 25		256		
		(Placed on diet and insulin from here on)		

Read before the Medical Section, Ohio State Medical Association, at the 84th Annual Meeting, Columbus, May 13-15, 1930.

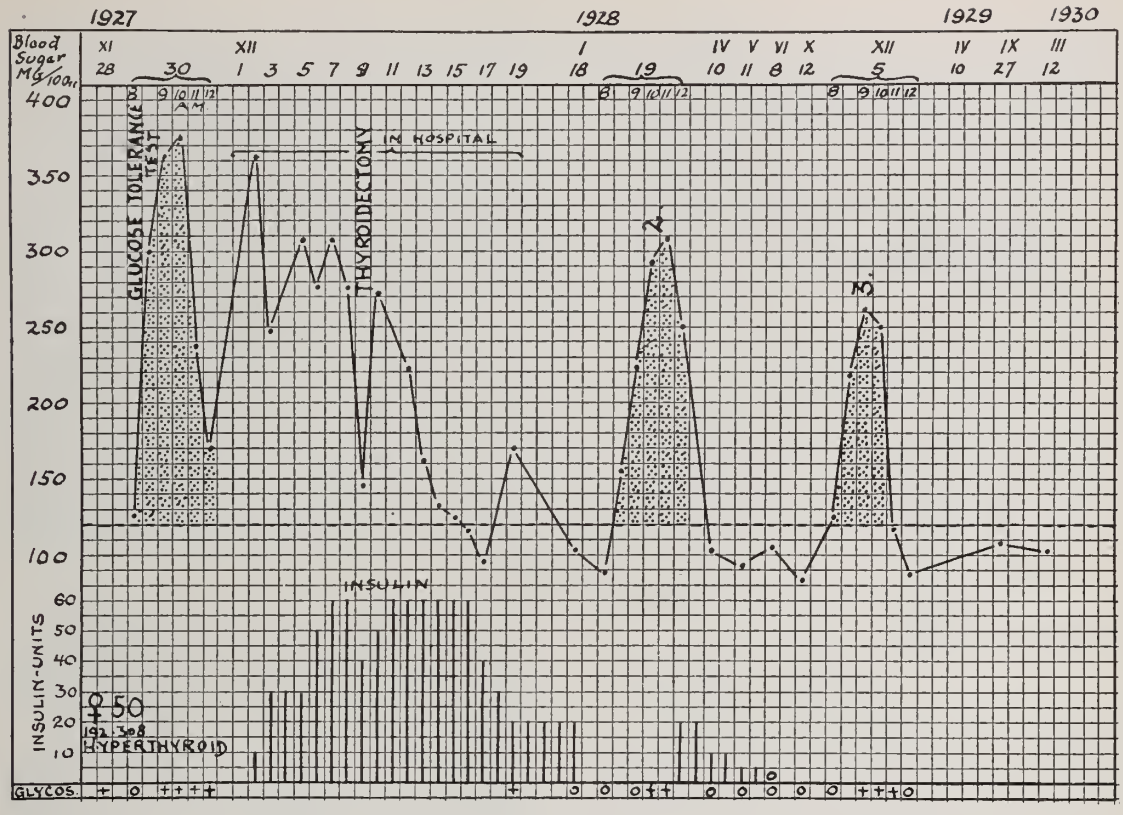


CHART II.

Blood and urine sugar data on a woman 50 years of age, hyperthyroidism, before and after thyroidectomy, also showing one glucose tolerance test before and two after thyroidectomy, eleven months apart. The case shows a progressive improvement of carbohydrate metabolism to the point of discontinuing insulin, with normal blood sugar checks for nearly three years.

his colleague who is prepared to cope with it. He does not feel that his prestige is lessened by sending a patient to the roentgenologist for consultation, and the laboratory worker can and should be used with equal assurance. Not only does this not destroy the patient's confidence but actually increases it, for he understands that everything possible is being done to work out his problem.

ILLUSTRATIVE CASES

As an illustration of the disastrous results which may follow an error in interpreting the symptoms of mild hyperglycemia or glycosuria, the case may be cited of a woman 56 years of age, hyperthyroid and hypertensive, with a blood pressure of 150/70. The data on her case are outlined in Table I, and show that periodic glycosuria should not be disregarded even though the blood sugar is normal. Had a glucose-tolerance test been made at the time the patient first showed glycosuria, no doubt a lessened carbohydrate tolerance would have been demonstrated. With close observation, a regulated diet, and insulin if indicated, the patient today would be on a satisfactory maintenance diet without any worries, since the carbohydrate tolerance improves after thyroidectomy and often returns to normal. As the situation stands, it is distinctly embarrassing to the physician who was in charge during her first hospitalization.

A contrasting picture is presented by the case of a woman 50 years of age, hyperthyroid, and with a blood pressure of 165/90. She had been 35 per cent overweight but had been losing weight because of her hyperthyroidism, so that at the time of admission she was but 19 per cent overweight. The only point of consequence in her past history is that a year previously she had suffered a severe attack of tonsillitis. The laboratory data in her case are tabulated in Chart 2. At entrance, November 28, 1927, she presented a heavy glycosuria, and a glucose-tolerance test made two days later resulted in a diabetic curve, although her fasting blood sugar was normal (123 mg. per 100 c.c.) Her subsequent blood-sugar studies showed marked hyperglycemia, ranging as high as 364 mg. per 100 c.c. fasting, and during preparation for her operation she was given as much as sixty units of insulin per day. After the thyroidectomy the blood sugar returned to normal rather abruptly, insulin was decreased, and the patient was discharged on the ninth day with a normal blood sugar on twenty units of insulin daily.

A little more than a month after her operation a second glucose-tolerance test was made, and some improvement was shown. Ten units of insulin per day were continued for another five months, and on each subsequent examination the blood sugar was normal and the urine sugar free. Finally, all insulin was discontinued, and for six months both urine and blood continued normal. The third glucose-tolerance test, made a little more than a year after the first, showed still more improvement, though not yet complete restoration to normal. The patient continued without insulin but on a slightly regulated diet, still maintaining a normal blood sugar on all examinations to date.

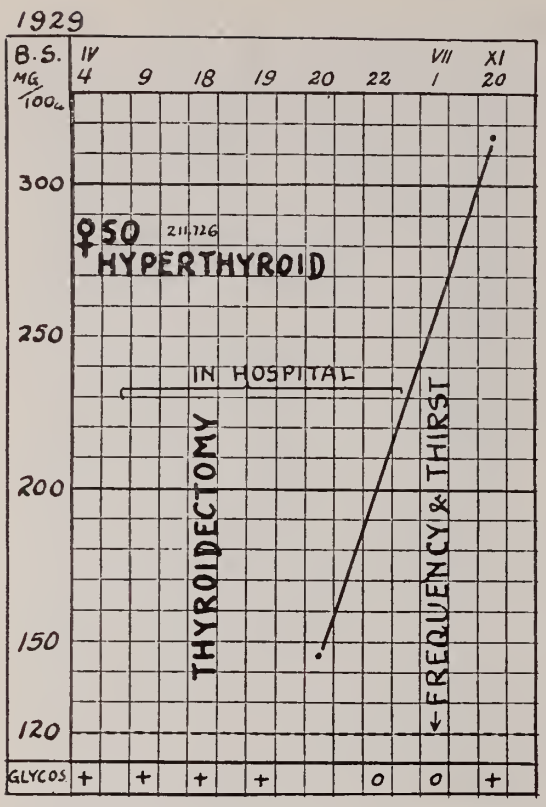


CHART III.

Data on a woman 50 years of age, hyperthyroidism, who showed glycosuria before and after operation. Only one blood sugar was done while the patient was in the hospital, two days after thyroidectomy and since there was but a slight rise of this it was disregarded and the patient discharged without diet or routine of any kind. In three months the patient develops classical symptoms of diabetes and in seven months comes back with blood sugar of 316 mg/100 cc. and has to be treated as a frank diabetic. All this could have been avoided by a slight dietary restriction "in time".

In this case there was a more severe disturbance of the carbohydrate metabolism at the beginning than in the first case cited, but with a continued definite improvement under treatment. If only the original data were considered, that is, glycosuria on entrance and the fasting blood sugar of 123 mg. per 100 c.c. two days later, without the glucose-tolerance test, these symptoms in the presence of hyperthyroidism would not be impressive, for they would be more or less expected. The intensive investigation carried out, however, showed clearly and unmistakably the true condition of the patient and made it possible to institute the proper measures from the start. Now the patient lives a comfortable life on a mild routine without insulin, instead of being subjected to an increasingly severe diabetic routine with a downward progression of the disease which is discouraging to any patient and, from the medical standpoint, is poor psychology. A certain insulogenic weakness is still present, as the last tolerance test shows, but if improvement continues in the future at the same rate as it has in the past, it is probable that almost complete restoration of function will take place in the course of another year or two—and that is a goal worth anticipating.

Another case of hyperthyroidism in a woman 50 years of age is summarized in Chart 3. With the exception of nervousness, tremor, and loss of weight for the past year there was nothing of any consequence in her past history. Her blood pressure was 150/90, and she had been troubled with nocturia for a short time. Her weight had previously been normal, but she had lost fourteen pounds during the past year. The glycosuria which had been present on admission persisted on subsequent examinations. No blood-sugar studies were made until she had been in the hospital for eleven days, and two days after thyroidectomy the blood sugar was but slightly elevated, being only 146. This was disregarded, the more so since she was sugar free two days later, and the patient was discharged by the surgeon, who thought his obligation to her had been fulfilled since the operation was successful. Seven months later the patient was seen by the internist, who found classical symptoms of diabetes, blood sugar of 316 mg. per 100 c.c., and glycosuria.

This case shows clearly how dangerous it is to disregard glycosuria or a slight hyperglycemia without sufficient laboratory evidence to determine the condition of the patient's carbohydrate metabolism.

Although the majority of such cases are hyperthyroid, patients are seen who do not have this complication. As an example, the case of a man sixty-six years of age may be cited. Usually, if diabetes develops at all at such an advanced age, it is mild in nature and often considered negligible. No case of diabetes is really negligible, however, for I believe that diabetes, once demonstrated, no matter what improvement follows, always implies a carbohydrate weakness which will come to the fore on slight provocation, as this case clearly demonstrates.

The patient, whose progress is illustrated in Chart 4, had always been in good health. In 1919 prostatectomy had been performed, and he had made an uneventful recovery. Several urine examinations in 1922 did not reveal the presence of sugar. In 1923 epidydimitis developed, and no sugar appeared in the urine subsequent to this, nor yet in 1924. In February, 1926, there was a slight rise in the blood sugar to 149. When this was rechecked a month later it was 114—normal.

It might be questioned whether this slight rise in the blood sugar was a warning or of no consequence in a man seventy years of age. Undoubtedly it was a warning, for ten months later heavy glycosuria developed, with a blood sugar of 400, and the patient had become a frank diabetic. Could his diabetes have been prevented by a somewhat restricted diet had not the original rise in the blood sugar been disregarded? I feel rather certain that it could have been, especially in the light of subsequent progress.

The patient was hospitalized for two weeks, put on insulin and a diabetic diet, and his blood sugar returned to normal. He was discharged without insulin and on a fairly liberal diet. For four years he did well, and on each subsequent examination his urine was sugar free and the blood sugar was normal until, in January, 1930, at the age of seventy-four he developed cystitis.



CHART IV.

This chart shows a progress of a man 74 years of age, at this time whose diabetic condition was quickly and well-controlled but when an infection (cystitis) appeared four years later, his status was greatly aggravated.

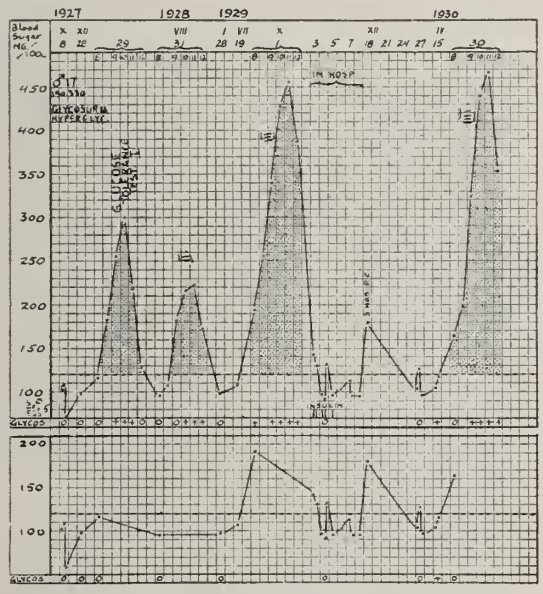


CHART V.

Repeated glucose tolerance studies and other blood sugar examinations on a boy 17 years of age in the upper part of the chart. In the lower part of the chart just the fasting blood sugars are given, taken directly from the chart above. Such studies show how much more complete a picture one gets from detailed studies of an individual.

Again his diabetes came into the foreground, requiring the routine measures for control. To date he is on a small dosage of insulin—five units twice a day.

The diagnostic problem presented by such a case during the period from 1927 to 1929 would be most difficult. With the blood and urine normal on repeated examination, how could any one state that there was a diabetic anlage present? Even though it was there definitely and unmistakably, there was no evidence of it. Such are the crucial and difficult problems which an internist faces daily, and they show graphically the reason why a thorough investigation is necessary before an opinion can be rendered.

The case of a seventeen-year-old college boy, fifteen per cent underweight, is enlightening. From Chart 5 it can be seen that on October 8, 1927, glycosuria was not present, and the blood sugar, checked before each meal, was normal. Being of Jewish extraction, with a family history of diabetes on both sides, when he stated that hyperglycemia had been found four months previously, he was advised to eat moderately and to eliminate sugar and pastry. Another examination two months later revealed normal blood sugar and no glycosuria. A glucose-tolerance test made the next day, however, was frankly diabetic. The patient was kept on a moderately restricted diet, and when the tolerance test was repeated eight months later there was much improvement. This looked encouraging, for it suggested mild, early diabetes, and offered the hope that improvement would continue uninterruptedly until almost a normal condition was reached. Two more blood-sugar examinations in the course of a year were both normal. Just recently, however, the patient has admitted that at this stage he became careless about his diet, and when the tolerance test was repeated for the third time on October 1, 1929, the contrast was startling.

The patient was then placed in the hospital for a few days on a small dosage of insulin, but all this time his blood sugar was normal, morning, noon, and night. This proved that the diabetes was mild; but even a mild diabetic status in a young person is potentially severe if not well controlled. Subsequent examinations, with the exception of that on December 18, 1929, always showed a normal blood sugar, and glycosuria was found but once. The examination on December 18th was three hours after a meal. This figure should be normal, and the result suggested that danger lurked. A fourth tolerance test was made on April 30, 1930, and the resultant curve is virtually the same as that of the previous test.

The lower portion of Chart 5 presents the same data as the upper portion with the exception of the tolerance curves. It shows no sign of any abnormality or weakness for three years. On these data alone the boy could not have been pronounced diabetic. In fact, the evidence seems

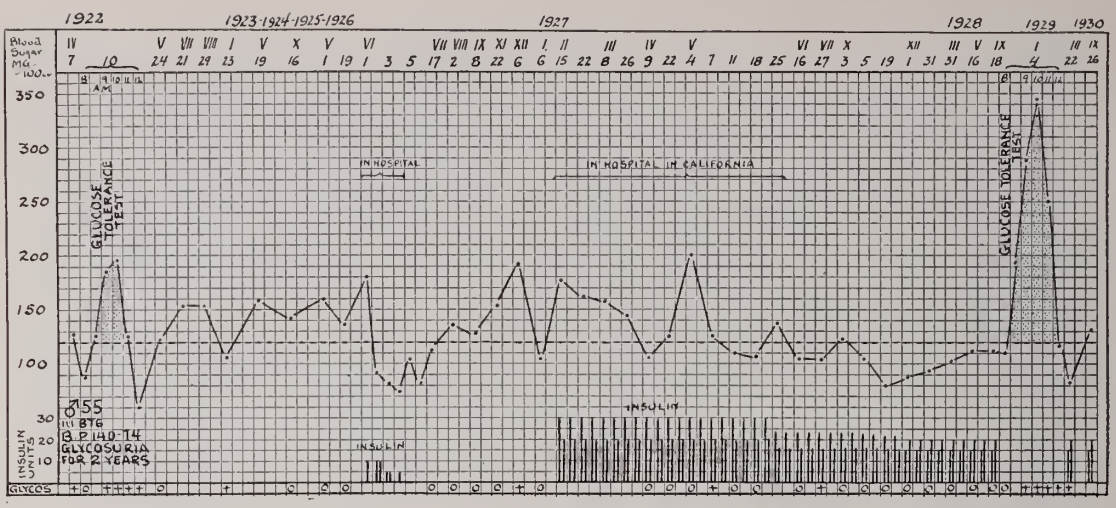


CHART VI.

Blood sugar studies in a man 55 years of age, extending over a period of eight years.

to show that diabetes is not present. Yet there was diabetes; there was a weakness of the carbohydrate metabolism, as more rigid studies indicated. The first clue to any abnormality of the carbohydrate metabolism would have been presented on October 8, 1929, when there was a fasting blood sugar of 192 mg. per 100 c.c.

Chart 6 illustrates graphically the case of a man 55 years of age in 1922, who states in his history that glycosuria was found in 1920 when he applied for life insurance. This cleared up on a restricted diet and he was granted a policy. He had avoided sweets since then, but had had no further urine examinations. There was no polyuria and no nocturia. His blood pressure was 140/74 on April 7, 1922, when he presented himself for examination. A trace of sugar was found in the urine and but a slight hyperglycemia—129 one hour after a meal, a figure which is normal. Because of the glycosuria a glucose-tolerance test was made three days later. This indicated a borderline case of diabetes. Subsequent blood-sugar examinations for the next four years showed only slight hyperglycemia until June, 1926, when the fasting blood sugar was 180. After four days in the hospital on a restricted diet and a few small doses of insulin, the blood sugar promptly returned to normal. The patient was discharged without insulin, and the next few blood-sugar examinations were normal. Later the same hyperglycemia returned. In 1927 he went to California, where he was in a hospital on a diabetic diet with large doses of insulin (fifty units per day). His blood sugar returned to normal, but he has been on insulin ever since, 35 units per day being required to keep him in good physical condition and his blood sugar normal. In 1929 the glucose-tolerance test was repeated, and the chart shows the progressive rise and elongation of the curve.

Looking back over this case, the evidence in 1922 might indicate, considering the patient's age, either absence of diabetes or a mild diabetic state. Without the data of July and August of that year, it would be difficult to state that the man was diabetic; yet the tolerance test in 1922 definitely showed a metabolic weakness. Such a metabolic weakness, I am convinced, has a definite practical value, since its recognition, followed by the institution of proper and sufficient measures, will save the patient much sorrow later on.

The problem is difficult to handle, nevertheless, for the patient is rare who will cooperate with his physician when he feels well and has only a slight abnormality, unless he has a knowledge of the subsequent evolution of such a condition. It was for this reason, which is purely psychological, that in 1921 I coined the term "the prediabetic stage," which has since become recognized the world over. Tell the patient that he has but a slight rise of the blood sugar or a slight hyperglycemia, and he is unmoved. It means next to nothing to him. Tell him that he has a slight disturbance of the carbohydrate metabolism, and the effect is similar. Tell him, instead, that he has a "*prediabetic state*," and he will cooperate, because he knows what diabetes means. This is preventive medicine. Preventive medicine, at its best, is a thankless job from the standpoint of the physician, but it is our duty to the public.

The difficulty of evaluating the true status of a patient in the absence of any clue can be gleaned from Chart 7, which shows the result of two glucose-tolerance tests made in two different cases in the absence of any symptoms suggestive of diabetes. The first case is that of a woman 55 years of age who came in complaining of headaches. Her blood pressure was 210/100, her weight had been and still was normal, and both urine and blood sugar were normal. Yet the curve of the tolerance test was definitely diabetic.

The second case illustrated on Chart 7 is that of a man 53 years of age. His blood pressure was 158/86. He came in because of an enlarged prostate gland. On admission, his blood sugar was 128 two and a half hours after a meal. Six days later his fasting blood sugar was normal. There was no glycosuria on repeated examinations. His weight was normal. No strictly normal individual, however, should have a blood sugar of 128 two and a half hours after a meal. This, then, was the clue which led to a tolerance test, which, as may be seen by Chart 7, showed a definite diabetic condition.

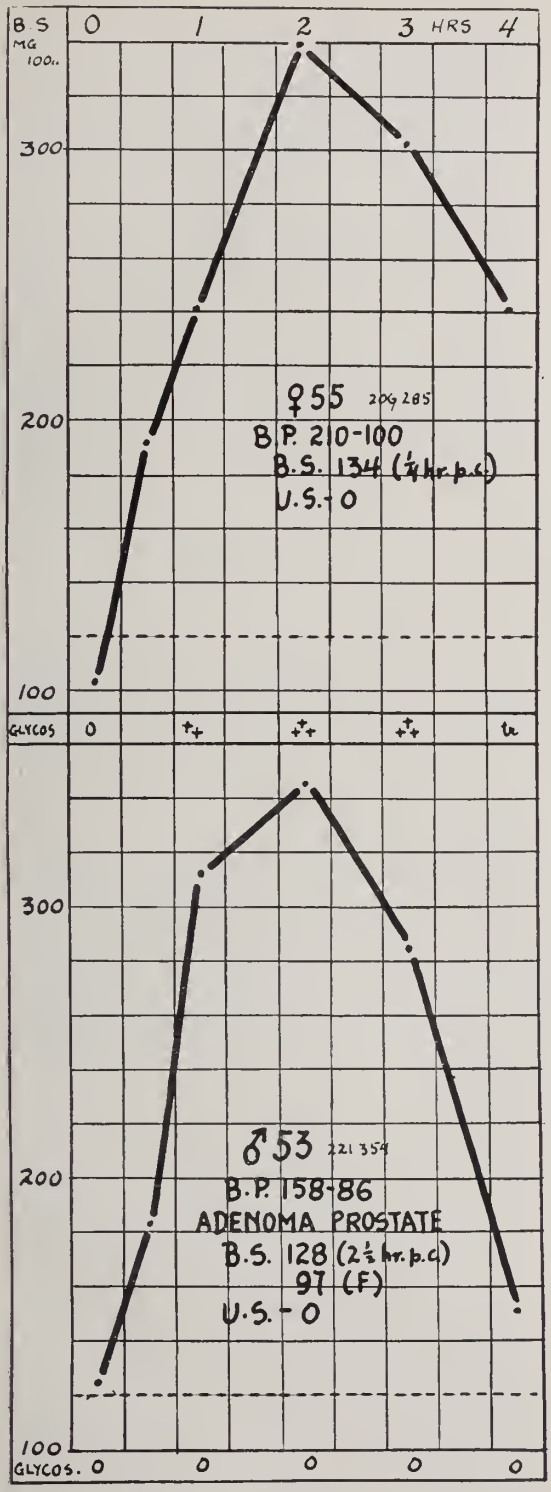


CHART VII.

Two glucose tolerance tests on patients which show how difficult it is to evaluate the true status of a patient in the absence of any clue or symptoms suggestive of diabetes. Both are diabetic, yet clinically a clue is lacking to this decision and the true status is brought out first in detailed laboratory data.

Both of these cases were picked at random to illustrate how difficult it is at times to make a satisfactory prediction. In one case there was no clue whatever to the patient's true condition; in the second there was only a slight suggestion—yet both were diabetic. Such a study makes one wonder how many cases of diabetes, seen in routine practice, are missed in their early or transitory stages and diagnosed only after they have developed fully. Hence the subject of this paper, which was chosen to call attention to the rather difficult problem of differential diagnosis presented by these patients, with the subsequent development of the disease if these early findings are disregarded by either physician or patient.

CITATION FROM THE LITERATURE

In the literature dealing with this topic similar views are evident. Thus Hijmans van den Bergh[1] says: "We know of no boundary between previous glycosuria and real diabetes." Von Noorden[2] defines diabetes as a condition in which, through succeeding weeks, months, or years, after an intake of considerable carbohydrate, or in other cases without such a carbohydrate intake, sugar is excreted in the urine. Krehl[3] characterized diabetes by the sugar excretion through the urine which exceeds the normal boundaries without an increased carbohydrate intake. Wiechmann[4] reports two febrile cases with hyperglycemia and glycosuria which appeared without any increased intake of food.

Freund and Marchand[5] think, for instance, that the height of the blood sugar depends on the injury of the liver by infection, since it is mostly during infections that hyperglycemia and urobilinuria run parallel and quite independently of the height of the fever. Wiechmann, however, explains this in another manner; namely, that since the time of Claude Bernard[6] it is known that on puncture of the calamus scriptorius of the fourth ventricle, hyperglycemia and subsequent glycosuria appear. Brugsch, Dresel, and Lewy[7] proved that on the inner side of the dorsal nucleus of the vagus lie the nuclei of the sympathetic fibers, and if these are injured hyperglycemia and glycosuria follow. Aschner[8] also had shown that from the mesencephalon, or more specifically through the injury of the hypothalamic region, glycosuria can be brought about. This probably depends on the sympathetic centrum in the hypothalamus, as described by Karplus and Kreidl[9]. Thus it is necessary to consider the possibility that meningitis injures, either directly or indirectly, the sugar centrum in the medulla oblongata, which brings on hyperglycemia and glycosuria, according to Wiechmann. This, in turn, may explain the hyperglycemic cases in poliomyelitis, described by Nordmann.[10]

DISCUSSION

V. C. ROWLAND, M.D., Cleveland: I think Dr. John's paper is timely and important because of the emphasis which it throws upon prevention. One frequently has the opportunity over a period of years of seeing patients who had transient

glycosurias during the course of acute infections, pregnancies, etc., with or without hyperglycemia, later in life develop a definite clinical diabetes. Increasing weight and infections of course favor this development, which therefore is to a considerable degree subject to intelligent control.

I wish to refer also to another temporary form of diabetes occasionally met with—namely in syphilis. I have now a patient with a constantly normal urine and blood for a period of seven years. When he first came he had the picture of a severe clinical diabetes with marked weight loss over a period of months. He had an old syphilis and a four plus Wassermann. The glycosuria was not controlled during the first week by dietetic management but after anti-syphilitic treatment over a month or six weeks he became quite non-diabetic and has remained so with a course of bismuth injections twice a year.

REFERENCES

1. Hijmans van den Bergh, A. A. Vorlesungen ueber die Zuckerkrankheit. Berlin: Julius Springer, 1926.

2. Von Noorden, C. Die Zuckerkrankheit und ihre Behandlung. 7 Aufl. Berlin: A. Hirschwald, 1917.

3. Krehl, L. Pathologische Physiologie. 9 Aufl. Leipzig: F. C. W. Vogel, 1918.

4. Wiechmann, E. Ueber transitorischen Diabetes mellitus bei fieberhaften Erkrankungen. München. med Wchnschr., 1928, 75: 1035-1036.

5. Freund, H., and Marchand, F. Ueber das Verhalten des Blutzuckers im Fieber. Deutsches Arch. f. klin. Med., 1913, 110: 120-127.

6. Bernard, M. C. Leçons sur le diabète et la glycogenèse animale. Paris: J.-B. Baillière et Fils, 1877.

7. Brugsch, T., Dresel, K., and Lewy, F. H. Beiträge zur Stoffwechselneurologie. I. Zur Stoffwechselneurologie der Medulla oblongata. Ztschr. F. exper. Path. u. Therap., Berlin, 1920, 21: 358-379, 2 pl.

8. Aschner, B. Zur Physiologie des Zwischenhirns. Wien. klin Wchnschr., 1912, 25: 1042.

9. Karplus, J. P., and Kreidl, A. Gehirn und Sympathicus. Pflueger's Archiv für die gesammte Physiologie, 135: 401. Bonn: Martin Hager, 1910.

10. Nordmann, M. Glykogenber bei Poliomyelitis anterior (Ein Beitrag zur Stoffwechselneurologie der Medulla oblongata). Virchow's Arch. f. path. Anat., 1927, 263: 832-838.

Pathological Considerations in Glaucoma

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IN endeavoring to present this subject we are at once confronted with practically every phase of ocular pathology. It is agreed that the term glaucoma refers not to a disease entity, as is described in the usual text book, but is a syndrome in which the main symptom is increased intra-ocular pressure and the pathological changes which take place, whether of cause or effect, are varied and complicated. Increased tension in the eye is preceded by some pathological change when we observe it in uveal tract disease, tumors, lens changes, trauma and numerous other ocular conditions, and it is difficult to think of any ocular disease in which it cannot be a complication.

Primary glaucoma has formerly been described as that type which has not been preceded by other ocular disease, but by more recent methods of study we can be sure in saying that there is no such thing. We must not, therefore, be limited in our considerations to the material we may study in microscopic sections of the late stages, for these must all be those of effect, but must consider the etiological factors which lie mostly in the field of biological chemistry and metabolism. It is very probable that some vascular changes are present in every case of glaucoma as causative factors, more particularly pertaining to capillary circulation and permeability.

Statistics agree that the outstanding influence in this disease is age, with other conditions as predisposing causes, but not positively indicative of a pre-glaucomatous state. Vascular disease is the dominant cause of age rather than advancing years, and the influence of arterio-sclerosis, auto-intoxication and other morbid changes in producing degenerative changes in the uveal tract, probably is the underlying factor, for glaucoma is rarely encountered in persons in good health or in the young. True it is that all our patients are not sufficiently examined to determine this factor.

Older investigators have attempted to explain increased tension along anatomical lines such as blockage of the angle of the anterior chamber (Leber), fibrosis of pectinate ligament (Henderson), or that it is due to a small corneal diameter coupled with a swollen lens which becomes adherent to the ciliary body (Priestly-Smith). However, none of these have explained the cause of so-called primary glaucoma which is deeper seated.

The uveal tract is undoubtedly associated in the production and interchange of the intra-ocular fluid and anatomical or functional changes in it must have their influence on its circulation. It is generally accepted that the intra-ocular fluid is secreted or dialized from the capillaries through the ciliary epithelium, from which it circulates through the eye and has its exit chiefly through Schlem's canal. Part, however, enters the vitreous which is the same chemically except for a substance called gel. Variations from normal in the rate and character of its secretion and of its interchange with the vitreous and lens is governed by the composition of the blood and the nature of the permeable membrane, be it the capillary walls or the ciliary epithelium.

Recent researches, notably of Duke-Elder, ignore the theories of actual circulation but believe that intra-ocular tension is maintained by a balance between intra-capillary pressure against the tissue pressure plus the osmotic pressure of the plasma proteins. The chief objection to this

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theory are our observations in the production of Iris Bombe. Friedenwald believes that an acute attack is brought about by a local vaso-motor crisis producing an increased permeability of the capillaries, as is evidenced by the swollen ciliary body produced by engorged capillaries, hemorrhage and fibrin deposits, and the escape of serum into the fluids of the eye. Further consideration of etiology would lead into a maze of theory and we must be satisfied in saying that the real cause is still unknown.

One outstanding observation that we make in the examination of a glaucomatous eye of the primary type, is the shallow anterior chamber, produced either by swelling of the lens itself or by its anterior displacement by an enlarged vitreous, or both. This anterior displacement, if produced only by a swollen ciliary body or by the blockage of filtration, at the equator of the lens, into the posterior chamber would certainly show an increase in the depth of the retro-lental space which is not the case. It is, therefore, reasonable to deduct that the immediate cause of rise in tension is the increase in volume of the vitreous and lens, tending to narrow the angle of the anterior chamber, which is the safety valve. This may be considered the dividing line between pathological changes of cause and effect.

By careful observations of these causative factors we hope to prevent the more damaging changes of effect. It is by the aid of modern instruments of precision that these changes can be earlier detected and analyzed.

The chief value of the slit lamp is in the detection of minute changes of inflammation and degeneration in the anterior segment of the globe which may lead to glaucoma. The initial pathological changes in these tissues are studied in the early stages, and their progress followed. In the cornea the very earliest signs of bedewing or edema are seen being confined to the epithelial cells and superficial layers of the stroma. Fine deposits on or bedewing of Decemet's membrane, presence of an aqueous flare with cellular content are evidence of a cyclitis and, therefore, of a secondary glaucoma which should be a guide as to treatment. The instrument by special attachment allows the accurate measurement of the depth of the anterior chamber and antero-posterior diameter of the lens. It has also shown that the hyaloid membrane of the vitreous does not really exist but is merely a region of surface condensation of one media (vitreous) on another (retro-lentel space of aqueous).

The gonioscope, an ingenious instrument devised by Troncoso on the principles of a periscope, affords the study of changes in the angle of the anterior chamber, obliteration of the filtration angle and variations in it with the use of miotics may give valuable aid in treatment.

Pathological changes of effect which take place in an eye which has been subjected to intraocular pressure are essentially the same whether we deal with the primary or secondary types. There is, however, no direct relationship between the degree of tension and the changes produced, but it is probably closely related to the compensation of tension by the vascular condition in the eye.

It is not necessary to discuss the more familiar changes of which we are all acquainted but an analysis of some might be of interest.

In the conjunctiva there may be variations from no change to that of extreme chemosis. This is explained on the theory that the increased tension produces interference with the normal inflow of blood into the eye through the anterior ciliary arteries entering the sclera at right angles. Extreme engorgement of these vessels leads to chemosis which may involve the lids. At intervals the edema may subside but the engorgement of these arteries persists. Blepharospasm may also play a large part in producing the edema of the lids.

In the cornea the greatest changes are noted in cases of sudden rise in tension rather than the height it attains. It begins in the faintest bedewing as noted by the slit lamp which is confined to the anterior layers. Analysis of this by microscopic study was greatly elaborated by Fuchs who has shown that there is an actual edema of the epithelial cells, engorgement of inter-lamellar spaces by fluid and a leukocytic invasion along the nerve filaments passing through Bowman's membrane. Coalescense of these droplets in the epithelium results in the formation of vesicles and bullae. Corneal anesthesia is presumably due to the pressure and infiltration about the nerve filaments. Steaminess of the cornea has probably a double origin, that of the edema and also to a change in the refractive index of the fibrillae under tension and this latter haze disappears at once after paracentesis.

The adult cornea is very tough and rigid and is not apt to give way with increased tension but the younger and less tough cornea stretches, producing ruptures in Decemet's membrane. The endothelium proliferates over these gaping points but does not prevent the infiltration of aqueous into the stroma causing permanent corneal opacity (cloudy swelling). After release of tension, wrinkling of Decemet's membrane takes place.

Further permanent changes may include hyaline or calcified deposits on the surface, reduplication of Bowman's membrane, invasion of blood vessels and connective tissue to form the degenerative pannus, ulceration and necrosis.

Changes taking place in the sclera are most pronounced in the young in buphthalmos and hydrophthalmos and are characterized by gradual stretching of the tissue at its weakest points

chiefly at the limbus and at point of entrance of the optic nerve causing excavation. Buphthalmos is the enlargement of the globe due to previous disease of the outer tunic of the eye and therefore a true secondary glaucoma. Hydrophthalmos is due to a congenital defect of the filtration angle and Schlem's canal. In some cases, however, the globe may tend to assume a quadrilateral shape due to stretching between the recti muscles or staphyloma may occur in areas of sclera previously weakened by disease.

Shallowness of the anterior chamber is a usual characteristic sign in glaucoma and at first is only a temporary change and at intervals may become deeper. In the beginning there is only apposition between the root of the iris and the cornea, later plastic exudate is formed which becomes organized and results in complete occlusion of the angle and spaces of Fontana. This also serves to decrease the iris circulation and atrophic changes in the iris result. In a similar manner occlusion may be produced by iris bombe or incarcerated iris. Increased albuminous content, cellular elements, exudates, hemorrhage and lens matter may interfere with the outflow and increased intraocular tension is the result.

It is not surprising that the delicate structure of the iris undergoes very marked changes as a result of tension which, of course, varies greatly in proportion to the amount and its duration. In severe cases of sudden onset the iris changes may be masked by corneal haze but venous engorgement and edema is in proportion to similar conditions in the entire globe and if the tension exceeds the intra-capillary venous pressure, necrosis of the iris at the pupillary border results. Atrophy of the iris may manifest itself in different elements of its structure. Thinning out of the pigment layers due to an inflammatory migration of pigment is easily discovered by retro-illumination. Atrophic changes in the stroma and musculature are the natural result of deficient blood supply, partially cut off by cicatricial processes at the root of the iris. In the atrophic change shrinkage takes place and ectropion of the pigment layer becomes a prominent finding, dilatation of the pupil being most pronounced where the ectropion is broadest. A dilated and stiff pupil has many factors entering into its production, and it is not surprising that after the iris has suffered this damage, and the angle closed by permanent adhesions, that miotics have little effect.

Mention should be made of Koeppe's sign which is a quite characteristic fine deposit of pigment found on the stromal surface of the iris and easily seen with the slit lamp. It is thought that this is pigment from the epithelial layer which has passed into the aqueous and been re-deposited on the surface of the stroma or it may be that it passes directly through the stroma. Koeppe thought this pathognomonic of glaucoma but it has been observed in cases of uveal disease without tension where it is a sign of iris degeneration only. It is, however, observed in every case of glaucoma and is a valuable sign.

Enlargement of the ciliary body and processes no doubt takes place at some stage in every case of glaucoma. Besides this there is a mass movement forward which aids in the closure of the angle and this is secondary to an abnormal dilatation of the capillaries, which reaction is probably due to toxic or irritative constituents of the blood or from some sympathetic disturbance. This congestion is most pronounced in the acute attack and causes paresis of accommodation and severe pain by pressure on the ciliary plexus of nerves, composed of ramifications derived both from the third and fifth nerves. As in the iris the end effect on the ciliary body is atrophy.

The congestion of the choroid with its resultant increased volume perhaps plays a large part in an anterior displacement of the vitreous and lens without any real change in their size. We cannot know to what extent there may be thickening of this tunic. Later it may be almost empty of blood resulting in an atrophy of the retinal pigment layer and a tesselated fundus. The atrophy is most pronounced around the disc and exit of vorticose veins.

The pathological changes in the retina causing loss of vision are at first only temporary and are the immediate result of pressure, stretching of nerve fibers, anemia of the arteries and congestion in the veins. Release of these factors will allow a return of vision but when often repeated and long maintained permanent loss is produced both central and peripheral. The mechanism of these atrophic changes must be very diverse as is evidenced in the endless variations in field changes. Microscopically there is an ascending atrophy of all the nerve elements beginning at the rods and cones and extending to the primary optic centers. The rods and cones become flattened but do not completely atrophy. Vacuolization is prominent in the ganglion cell layer and there is some replacement by proliferation of glial and connective tissue. Vascular disease of the retina is evidenced by the presence of venous thrombi and hemorrhages particularly when the tension is suddenly relieved.

Glaucomatous excavation is a result of a combination of atrophy of the nerve fibers and weakness of the lamina cribrosa. Reduction or disappearance of the cup is produced by equalization of intra-ocular pressure with intra-cranial pressure and by the filling up with glial tissue.

681 E. BROAD STREET.

Diagnosis of Brain Tumor

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THE diagnosis of brain tumor is at once the simplest and the most difficult task of the neurologist or neuro-surgeon. Dejerine, when an old man, once remarked that all he ever tried to say was whether or not the tumor was on the right or left side, above or below the tentorium. One of his younger colleagues protested that localization should be more accurate. "But you are not yet seventy", was the old man's reply.

When a tumor encroaches upon the intracranial contents, the signs and symptoms which develop depend on two factors:

(1) A bony capsule which permits of no expansion, surrounds the brain.

(2) The brain is a highly specialized structure with numerous definitely localized functions whose focal impairment is soon apparent.

A disturbance of the delicately balanced fixed capacity of the skull causing an interference with the circulation of the cerebro-spinal fluid with an attendant rise of the intra-ventricular pressure gives rise to general symptoms of brain tumor. Tumors so situated as to bring this about quickly, will first declare themselves by general symptoms. On the other hand if the tumor originates in areas of the brain which are not "silent" the first symptoms are apt to be focal in character. Of course, in the later stages of brain tumor, we may have both general and focal signs. At such times the focal signs are sometimes misleading because of remote pressure effects. For example, a tumor in the occipital poles may produce cerebellar signs and vice versa.

GENERAL SYMPTOMS

Headache; vomiting and dizziness; choked disc; psychic mental changes; convulsions—focal or general; changes in the pulse, respiration and temperature; changes in the spinal fluid pressure as registered by the manometer.

Headache: May be the first sign. Usually occurs at some stage. May be violent, intractable, paroxysmal, neuralgic, migrainous, or pulsating in aneurisms; may be diffuse or local with local tenderness, and in such instances may be of localizing value, but may also be referred locally. I have recently seen a cerebellar tumor with local tenderness over the parietal region. The headache is especially occipital and worse with sudden strain.

Vomiting: Not universal; usually late. More frequent in cerebellar tumors or tumors in the posterior fossa. May or may not be associated with nausea. Projectile vomiting is over-rated and is not a pathognomonic symptom it is said to be. *Dizziness* is nearly always present in infratentorial tumors.

Choked Disc: Very important. Occurs in eighty per cent of all tumors and ninety per cent of all choked discs are due to tumors. Seen most commonly in tumors which shut off the aqueduct of Sylvius and cause internal hydrocephalus. May be unilateral, but usually bilateral. If not relieved leads to secondary atrophy and blindness. Primary optic atrophy may be the first sign of the tumor which presses on the chiasm or tracts.

PSYCHIC OR MENTAL CHANGES

Stupor or somnolence; dementia; hallucinations and delusions; euphoria in left frontal lobe tumors.

All these changes are more marked in tumors of the frontal lobe or corpus callosum and least common in posterior fossa tumors.

Convulsions: May occur at any time but not in every case. Frequent in tumors of or near the motor cortex or temporo-sphenoidal lobe. Loss of consciousness without convulsions, also petit mal, may occur. Jacksonian or focal convulsions may be present in tumors of the motor cortex. Convulsions may exist and may be mistaken for idiopathic epilepsy for fifteen years prior to the diagnosis of brain tumor. Too much emphasis cannot be put on this statement, and time and patient study are often needed to make the correct diagnosis.

Pulse may be slow as the pressure increases; may have fever; Cheyne-Stokes' respiration and other respiratory anomalies may occur.

Other General Signs: Glycosuria may appear in tumors involving the floor of the fourth ventricle or the hypothalmic region. Diabetes insipidus may be present in lesions of the floor of the third ventricle; namely, of the tubar cinerium or infundibulum. Acromegaly or adiposity with increased sugar tolerance and low basal metabolic rates, together with feminine characteristics in the male, may occur in tumors of the pituitary or its neighborhood. Macro-genito-somia or pubertus praecox may occur in pineal tumors. Changes in spinal fluid pressure, more properly spoken of as intra-ventricular pressure, as registered by the spinal manometer are nearly always general signs of brain tumor. Care is needed in estimating this pressure. The patient should be lying on the side, and time should be allowed for the emotional nervous shock, with its attending rise in intra-ventricular pressure due to nervous influences, before the readings are taken. Increase in intra-ventricular pressure may be present in many cases of brain tumor when the discs are normal.

Read before the Section on Nervous and Mental Diseases, Ohio State Medical Association, at the 84th Annual Meeting, Columbus, May 13-15, 1930.

X-RAY STUDIES

(1) Ventricular estimations described by W. Dandy in Surgery, Gynecology and Obstetrics, May 1923. By this is meant: (a) Determining the position of the lateral ventricles by puncturing through a trephine opening. (b) Determining the size of the lateral ventricles by measuring the fluid obtained from each. (c) Communicability of the lateral ventricles determined by injection of Indio-Carmine into the ventricle and aspirating elsewhere. This procedure is quite valuable in determining compression of the ventricles due to tumors.

2) *Ventricular Encephalography* is another method introduced in recent years. This consists of introducing air into the ventricles through a trephine opening. However, this method has its dangers and should be used only when other methods to locate the tumor have failed. There is the danger of striking a blood vessel with subsequent hemorrhage.

(3) *Lumbar Encephalography* consists of introducing air into the subarachnoid space after withdrawal of spinal fluid by way of lumbar puncture. The process is quite simple. It consists of introducing a needle into the spinac sac, withdrawing five cubic centimeters of fluid at a time and replacing it with air. This has many advantages over the ventricular encephalography: (a) It is not a surgical procedure and can be done by the neurologist; (b) there is no difficulty presented in having to look for the lateral ventricles when the ventricles are distorted; (c) the needle does not traverse the brain tissue and there is no danger of hemorrhage; (d) one can usually fill all the subarachnoid space including the cisterns and sometimes the ventricles; (e) there is practically no mortality.

This procedure not only yields valuable information in the study of brain tumor but is a valuable aid in the study of epilepsy, both idiopathic and traumatic, together with the study of degenerative disease of the brain. This method usually helps to differentiate between tumors lying above and below the tentorium. In tumors above the tentorium the lateral ventricle is usually shown to be compressed on the homolateral side; in tumors in the posterior fossa either the air does not enter the ventricles at all or the air may enter the ventricles and show an internal hydrocephalus. If the air does not enter the ventricles from the lumbar route then ventriculo-encephalography is permissible.

FOCAL SYMPTOMS

These depend on the direct and indirect involvement (by the tumor) of those areas of the brain which subserve special functions. Early focal symptoms are most important. Late focal symptoms may be due to remote pressure or distortion. These late signs give rise to "false" localizing symptoms leading to erroneous diagnosis and fruitless operations. Focal signs are best considered in a discussion of the diagnosis of tumors in various locations.

TUMORS OF THE FRONTAL LOBES

Tumors of the frontal lobes, if on the right side, give few or no symptoms in right-handed individuals. If on the left side, in a right-handed person, may give one or several of the following symptoms:

(1) *Mental Symptoms:* These symptoms usually take on the character of euphoria, and a tendency to grandiosity closely resembling the mental picture of paresis, and until the physical examination is made, might occasion some difficulty in differential diagnosis. In some cases the differential diagnosis from paresis may be quite difficult. However, if careful clinical neurological examination is made, there is usually no great difficulty in differentiating a tumor from paresis. Facetiousness or "Witzelsucht" is another one of the common symptoms of tumor of the left frontal lobe.

(2) *Dementia* characterized by poor orientation, memory defects, and confusion is likewise present in frontal lobe tumors.

(3) *Ataxia* on the contra-lateral side may be present. This is due to involvement of the fronto-ponto-cerebellar pathways.

4) *Contra-lateral Hemiparesis* with the accompanying signs of pyramidal involvement such as plantar reversal, hyper-reflexia and clonus, can usually be made out if sought for carefully.

(5) *Abdominal Reflexes* diminished or easily exhaustible, or absent on the contra-lateral side is the rule.

(6) *Reflex Grasping* or groping movements of the contra-lateral hand constitute a very interesting symptom in frontal lobe tumors. This interesting subject has been carefully reviewed and discussed by Walter Freeman. His paper is well worth reading. I have seen this reflex grasping in cases of frontal lobe tumor. By reflex grasping is meant the grasping which occurs in infants when an object is placed in its hand. The hand reflexly closes around the object and at times the reflex is so strong that the child can be lifted off its feet by the aid of this reflex. After the pyramidal tract has developed this reflex disappears in children. It seems to be replaced in lesions which involve without destroying the pyramidal pathways.

(7) *Choked Disc* usually appears later in the course of frontal lobe tumors.

(8) *Jacksonian Phenomena* may result if the tumor extends backward towards the motor strip, and later, if the pyramidal pathways are transected, paralysis may result. The following case is characteristic of left frontal lobe tumor in a right-handed individual:

Patient was a white male, age 37, who gave the following history. Seven years before the patient had begun to have generalized convulsions. These were ushered in by a tremor of the

right hand. It was not a convulsive movement of the right hand, but a tremor which resembled more that of Parkinson's disease. The patient's wife noticed that at times this right hand trembled even when the patient was sitting quietly, and when no convulsions would supervene. The patient had had a diagnosis of epilepsy and had been treated for this with luminal, bromides, etc., without relief. He had had attacks of headache and vomiting at times. The vomiting was usually accompanied by nausea and was not of the projectile variety. He showed mental symptoms of somnolence, euphoria, facetiousness, confusion, loss of memory and at times, loss of orientation. The neurological findings were as follows: patient showed no choked disc; there was a corneal analgesia of the left eye; hemiparesis of the right side of the body; diminished abdominals on the right side which were easily exhaustible; Chadduck, Babinski, and Oppenheim were positive on the right side. One of the interesting symptoms in this patient was that when the Oppenheim was elicited on the left leg a positive response was obtained on the right side. This finding was quite constant. There was definite ataxia of the right arm and leg, and the gait was quite ataxic suggesting cerebellar tumor. Reflex grasping of the right hand was well marked. When the palm of the right hand was rubbed with the examining finger, the right hand closed over the finger reflexly. At times the patient had great difficulty in releasing the examining finger. He also gave a history that at times he would take hold of objects and would not be able to let go when he wanted to do so. The spinal fluid was under increased pressure, registering forty centimeters of water. However, the spinal fluid examination was negative;—Wassermann negative, gold curve negative, slight trace of globulin, and no increase in lymphocytes.

A bone flap was turned down on the left side by Dr. Geo. Heuer disclosing a large cystic glioma infiltrating the left frontal lobe. The cyst was evacuated, but no attempt was made to remove the tumor. The patient was given deep *X*-ray therapy with some improvement.

FRONTAL LOBE TUMORS EXPANDING TO THE BASE

Foster Kennedy in 1911, called attention to the fact that tumors of the frontal lobe extending to the base can be accurately recognized by opthalmological examination. This subject has been reviewed by Walter I. Lillie of Rochester, Minn., in a paper read before the Section of Opthalmology of the American Medical Association, Washington, May 19, 1927. He concluded that "basal lesions of the frontal lobe can be localized accurately from the opthalmological examination. In a unilateral lesion, homolateral central, or ceco-central scotoma associated with either a normal, pale, atrophic, or choked disc with contra-lateral normal central vision and choked disc is characteristic. In a bilateral lesion, bilateral central or ceco-central scotomas are present, associated with bilateral choked disc. Basal lesions comprise about fifteen per cent of frontal lobe tumors and can be diagnosed as readily and as accurately ophthalmologically as chiasmal lesions."

(9) *Homolateral Fifth Sensory Disturbances* or disturbances of smell or contra-lateral pyramidal findings with contra-lateral disturbances of the abdominal reflexes may be found in addition to the ophthalmological syndrome above described. The following case is a good example:

Patient, W. R., white, male, age 53, came to the office complaining of headache. His wife stated that his symptoms began about four weeks ago with headache, double vision, pains in the vertex of the skull and over the left eye and over the left frontal parietal region. Mental examination: the patient was quite somnolent, somewhat euphoric and demented with lack of orientation, memory defects and confusion. The neurological examination disclosed bilateral choked disc, more swollen on the left side; bilateral central scotoma; corneal analgesia of the left eye; weakness of the left lower face; hemi-paresis of the right side with exaggerated deep reflexes on this side; positive ankle clonus and positive Gordon sign on the right; diminished, exhaustible abdominal reflexes on the right side. The spinal fluid was under increased pressure, registering fifty centimeters of water. This patient showed many symptoms suggestive of encephalitis, but no signs of inflammatory changes in the spinal fluid were found. Operation by Dr. Geo. Heuer disclosed a tumor of the frontal lobe extending to the base.

TUMORS OF THE MOTOR CORTEX

(1) These tumors show quite characteristic symptoms, the Jacksonian fits being the most dramatic. These occur in the early stages of this type of tumor. These spasms may involve any part of the muscles of the opposite side of the body. Usually there is a twitching of the face, a conjugate deviation of the eyes to the side opposite the tumor. There may be twitching of the hands and feet, depending upon the site of the tumor. If the tumor has destroyed the pyramidal tract, paralysis is the result. If the Jacksonian fits are severe, the convulsions may spread to the opposite side and become generalized, with loss of consciousness. A left sided tumor, if situated low in the neighborhood of the third frontal convolution, may give rise to expressive or motor aphasia. Conjugate deviation of the eyes with turning of the head to the contra-lateral side, associated with spasms of the face on the contra-lateral side occurs in tumors situated in the second frontal convolution.

(2) Conjugate deviation is also noted toward the side of the tumor when the tumor exerts a destructive effect on the pyramidal tract. The following is an excellent example of tumor of the motor cortex:

Patient, a white male, age 43, presented himself with a chief complaint of convulsions which were generalized. There was a history of unconsciousness and generalized convulsions beginning three years before. He said he had had several of these generalized convulsions. He complained of vertigo, especially when looking toward the left side. Neurological examination made about two years after the onset of the symptoms disclosed weakness of the left face; when walking with the eyes closed he deviated slightly to the left; held his head tilted to the right, with the chin pointed to the left. Patient was free from major attacks for about two years after the first onset, but dur-

ing this time had about twelve petitmal attacks. Patient consulted many doctors, remained in one hospital for about four weeks for intensive study. It was finally decided that he had epilepsy and the teeth and tonsils were removed. Patient returned to my office in January, 1930. At that time he was told that he had a tumor of the brain, the exact location of which was not definitely known. He was advised to have ventriculograms made, but refused at that time. The neurological findings at that time were as follows: Discs and visual fields normal (this examination was made by Dr. D. T. Vail, Jr.); corneal reflexes were diminished in both eyes; weakness of the left lower face; patient held his head tilted to the right side with the chin pointed upward and to the left; abdominal reflexes were not present; cremasteric reflexes were present on the right, absent on the left; motor power was definitely diminished in the left arm. At the time of this examination, patient gave an indefinite history of turning of the head and eyes to the left at the beginning of an attack. He ascribed this to the fact that he always looked toward the left, this was thought by him to be purely coincidental. However, as later events determined, this turning of the head toward the left was not coincidental, but was a definite localizing symptom of tumor.

The patient lived in a neighboring town and on March 20, 1930, his family physician called me on the telephone and said that the patient had begun to have Jacksonian spasms of the left lower face, with twitching of the left eyelid and conjugate deviation of the eyes to the left, and turning of the head to the left. These attacks would occur about every five to fifteen minutes. The family was urged to put the patient in a hospital; however, the convulsions continued in the home, and began to occur regularly every two to five minutes. These convulsions could not be controlled by luminal, bromides, or morphine. The patient was brought to the Good Samaritan Hospital where he had Jacksonian convulsions from every two to five minutes. During these convulsions, there were spasms of the left face, the head deviated to the left, deviation of the eyes to the left, twitchings of the left eyelid, and drawing of the lower jaw to the left. Between the attacks the patient was conscious but had a paresis of the lateral gaze, and weakness of the left lower face; the tongue deviated to the left; there was definite weakness of the left arm. The diagnosis of localization of the tumor was quite apparent. A bone flap was turned down on the right side by Dr. Geo. Heuer and a small tumor about 2.5 cm. in diameter was found in the motor cortex at the base of the second frontal convolution. (Figure 1). The tumor was carefully removed. The patient had about five convulsions after the operation, but these finally ceased and he has had no such convulsion since. It is interesting to note that the tumor was so carefully removed that he had no paralysis of any sort, and no asphasia. Naturally, however, one would not expect an aphasia in a tumor located on the right side, in a right-handed individual.

TUMORS OF THE PARIETAL LOBES

Symptoms of parietal lobe tumor:

(1) Disturbance in cortical sensation with impaired joint sensation and joint discrimination, together with astereognosis on the contralateral side.

(2) Apraxia may be noted.

(3) Homonymous hemianopsia,—due to pressure on the optic tracts.

(4) Contra-lateral hemi-paresis with pyramidal signs such as plantar reversal, clonus and disturbance of abdominal reflexes on the contralateral side are rather characteristic findings.

(5) The so-called total, or global aphasia with apraxia and alexia may be produced in left-sided involvements of supramarginal and angular gyri. The following case is fairly representative of parietal tumors:

Patient R. W., white, male, age 53, presented himself with the chief complaint of dizziness and pain in the back of the neck. Further questioning elicited that the patient had been ill for seven years, and that his condition was ushered in by generalized convulsions and biting of the tongue and involuntary urination. He had never complained of headache nor vomiting. The patient had had a diagnosis of epilepsy. He had complained of vague stomach symptoms and had been treated by gastroenterologists for this condition. Two years ago he began to show signs of mental confusion and dementia. For this reason he was brought to the neurologist. At the time of the neurological examination he was demented; memory and orientation were poor. The neurological examination showed normal fundi and normal pupils. He showed a right homonymous quadrant defect; (examined by Dr. D. T. Vail, Jr.); weakness of the right lower face; hemiparesis and hyper-reflexia of the right side with exhaustible ankle clonus on the right side; positive Oppenheim and Gordon on the right; diminished and easily exhaustible abdominal reflexes on the right side; astereognosis apparent in the right hand. A spinal puncture was performed. The fluid pressure registered forty-eight centimeters of water. Spinal fluid examination was negative as far as Wassermann, gold curve, cell count, and globulin were concerned. Operation disclosed a glioma in the left parietal lobe which had become cystic. The cyst was evacuated. However, afterwards the patient developed an aphasia and became completely paralyzed on the right side.

TUMORS OF THE TEMPORAL OR TEMPORO-SPHENOIDAL LOBES

These tumors if located on the left side may show localizing symptoms. If on the right side there may be a complete absence of any localizing symptoms. If the tumor is on the left side, and the patient is a right-handed individual, there will be aphasic speech disturbance. If the aphasia is of the sensory or perceptive type, there will be misnaming of objects, jargon aphasia, and impairment of reading and writing. Hearing is said to be impaired due to bilateral representation of hearing in the cortex. However, the hearing was impaired on the contra-lateral side in one of my cases when no other cause could be found for this loss of hearing. There may be a disturbance of smell. Generalized convulsions are fairly common. We may have hallucinatory, dreamy states in which incidents appear like mirages. Visual hallucinations occur in the contra-lateral half of the visual field. Contra-lateral quadrant or hemianopic field defects are present due to pressure on the optic tracts. We may have symptoms of macropsia in which objects appear

larger than they really are, or a condition of micropsia in which objects appear smaller than usual. Another interesting symptom is uncinate fits. These fits are accompanied by hallucinations of taste and smell, and by chewing movements of the jaws, and at times by excessive salivation. The fits occur in lesions involving the uncinate gyri. Slight contra-lateral hemi-paresis with accompanying pyramidal signs or sensory disturbances may occur. The right temporal lobe, like the right frontal lobe is "silent". However, this fact also may be of localizing significance, since it is possible that a tumor which produces generalized symptoms with no focal signs is apt to be located in the right temporal or right frontal lobe.

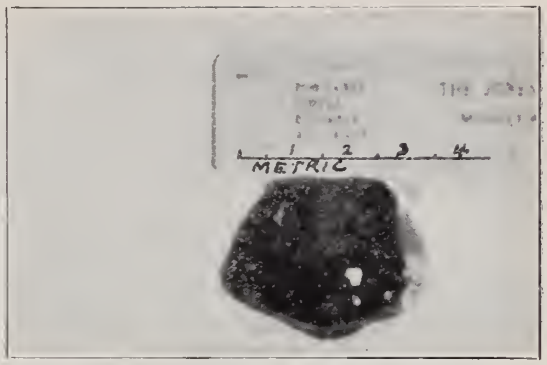


Fig. 1. Tumor of Right Motor Cortex. Removed from base of Second Frontal Convolution.

TUMORS OF THE RIGHT TEMPORAL LOBE

The following is an excellent example of this condition and shows how the tumor may be accurately localized even in a so-called "silent" area:

Patient, white male, age 45, was admitted to the hospital with a chief complaint of headache and vomiting. These attacks had come on rather suddenly two months before. The headache was relieved by vomiting and taking of catharsis. The neurological examination disclosed the following findings: the sense of smell was impaired; patient had a great difficulty in recognizing common odors such as benzine, perfume, etc. There was a bilateral choked disc, but the visual fields were normal as determined by a competent ophthalmologist. However, there was some enlargement of both blind spots. It is interesting to note that there was no hemianopic field defect. There was a corneal hypesthesia in both eyes. Hearing was diminished in the left ear; there was a weakness of the fifth and seventh motor nerves on the left side. The abdominal and cremasteric reflexes were diminished and easily exhaustible on the left side. There was a positive Oppenheim on the left, a sustained patellar clonus on both sides, but this was very difficult to exhaust on the left; however, it could be exhausted after long effort. *X*-ray examination aided very materially in diagnosing this case. The pineal body was calcified and was shown to be shifted to the left side. (Figure 2). Ordinarily the pineal body lies exactly in the middle and is shifted to the side in lesions lying above the tentorium. When the pineal body is calcified this is a very valuable sign in the diagnosing of supra-tentorial tumors. This sign was originally described by Naffziger. In the present case, a pre-operative diagnosis of right temporal lobe tumor had been made. Operation by Dr. Heuer revealed a glioma occupying most of the temporal lobe and part of the frontal lobe on the right side.



Fig. 2. X-ray showing shift of Pineal Body to the left in a Right Temporal Lobe Tumor.

TUMORS OF THE SPEECH AREAS

Tumors which cause aphasic disturbances are usually situated on the left side of the brain in right-handed individuals. While too much reliance must not be placed on aphasic disturbances in brain tumor, it is a general rule that if the aphasia is of the verbal or expressive type, the tumor is apt to be in the pre-rolandic area; if of the preceptive type, it is usually posterior to the rolandic area and below the Sylvian fissure. Of course, in the diagnosis of tumors in these areas, the other signs of tumor are of importance as corroborative signs. For example: a tumor of the left side of the brain produces an aphasia which is usually accompanied by hemi-paresis, contra-lateral quadrant or hemianopic defects, pyramidal signs or disturbances of abdominal reflexes on the opposite side.

TUMORS OF THE OCCIPITAL LOBE

Signs of these tumors are quite characteristic. They show the general symptoms of brain tumor accompanied by homonymous hemianopsia. If the tumor is large and presses forward on the pyramidal tract or sensory tracts, contralateral sensory or hemi-paretic defects may also be observed. These tumors are quite easily localized and diagnosed.

TUMORS OF THE CORPORA QUADRIGEMINA

One of the first signs is marked and early internal hydrocephalus due to compression of the acqueduct of Sylvius. Pupillary disturbances are usually present; ocular palsies also, especially paralysis of upward gaze. If the tumor extends forward to the red nucleus or superior cerebellar peduncle, we may have tremor and ataxia. If these tumors involve the internal and external geniculate bodies they may produce blindness and deafness. I have had practically no experience with tumors of the corpora quadrigemina.

TUMORS OF THE PINEAL BODY

These tumors produce similar symptoms to those of the corpora quadrigemina, together with the added symptoms of pubertus praecox if the tumor develops before the age of twelve or thirteen years. This added symptom is thought to be due to disturbances of internal secretion of the pituitary body.

TUMORS OF THE MID-BRAIN

The mid-brain comprises the cerebellar peduncle and the colliculi or corpora quadrigemina, together with the pineal gland. Tumors in this region give signs of involvement of the colliculi and pineal body. In addition, if anterior on the pes they give the so-called Weber's syndrome; that is, paralysis of the third nerve on the side of the tumor, with a contra-lateral pyramidal involvement. This is due to involvement of the root of the third nerve on the side of the tumor, together with pressure on the pyramidal tract on the side of the tumor before the pyradimal tract that has decussated. Weber's syndrome belongs to the class of so-called alternating hemiplegias. If the tumor involves the dorsal part of the peduncle (that is the tegmentum) or involves the red nucleus, Benedict's syndrome is seen. This syndrome includes a hemolateral third nerve paralysis with contra-lateral tremor and hemiataxia and hemi-paresis on the opposite side.

TUMORS OF THE PONS

These tumors begin usually with focal signs. The general signs appear very late. The focal signs are in the nature of alternating hemiplegia or crossed anesthesias; the alternating hemiplegia usually includes the homolateral sixth and seventh nerves, together with the contra-lateral paresis on the opposite side. Crossed anesthesia usually includes the fifth nerve on the homolateral side with hemi-anesthesia or hemi-hypesthesia on the opposite side. Due to the involvement of the sixth nerve, we have paralysis of lateral gaze.

TUMORS OF THE MEDULLA

These give much the same type of symptoms as do tumors of the pons; that is, crossed anesthesia, alternating hemiplegias. They involve the cranial nerves from the eighth to the twelfth on the side of the lesion with contra-lateral hemi-paresis and hemi-anesthesia on the opposite side. Such tumors usually are rapidly fatal because of the involvement of the vital centres in the medulla such as respiration, pulse, and blood pressure centres.

TUMORS OF THE CEREBELLUM

Ataxia is the outstanding symptom of cerebellar tumor. This ataxia is manifested by a peculiar drunken, wobbling gait, which is much easier to recognize than to describe. The ataxia is usually much more marked on the side of the lesion, although in late cases this may not be apparent. After all, the exact location of cerebellar tumors is only of academic interest, as it is only important to say accurately whether there is a tumor in the posterior fossa, as both sides can be easily explored at the same operation. In general, it may be said that in lesions of the vermis, the patient falls backwards or forward, whereas, in lesions of the hemispheres, he falls to the side of the tumor. Dysmetria is likewise a symptom of cerebellar tumor. By this is meant the failure to measure distances properly. Adiadocockinesis is said to be of value in the determination of such lesions, but is rather unimportant in cerebellar tumors which I have seen. The rebound phenomenon of Gordon Holmes likewise is said to be valuable in diagnosing cerebellar tumors, but this also has been unimportant in the tumors which I have seen. In my experience, this sign is more often present in cerebellar agenesia than in cerebellar tumor. By the rebound phenomenon is meant the following test: the patient is asked to flex the arm against resistance, using all his strength. The operator resists this flexion by holding the fist or wrist of the patient. The operator suddenly releases and immediately the fist flies back striking the shoulder or face of the patient due to lack of check action of the muscles. When a normal individual performs this test the fist does not fly back, but is checked by the antagonisis of the flexors. In the case of cerebellar tumors this checking of the antagonisis is lacking and the fist flies all the way back. The head is usually carried to one side. However, this is a misleading symptom as it also occurs in frontal lobe tumors. (See above).

Nystagmus is usually present in tumors of the cerebellum, though not always. I have seen a cyst containing sixty cubic centimeters of fluid evacuated from the cerebellum, in a patient who had no nystagmus. The so-called pendular reflexes are not to be considered too seriously, as they occur in other unrelated conditions. The diminished reflexes are usually due to secondary pressure atrophy of the posterior columns of the spinal cord, or they may be due to hypo-tonia present in some instances. The deep reflexes in cerebellar tumors may be exaggerated. Corneal analgesia or anaesthesia on the side of the tumor is an early and extremely valuable sign. We may have a later symptom of cerebellar tumor which is due to pressure; that is, involvement of the sixth and seventh nerves, and eighth with deafness on the side of the tumor. Tonic fits may also

occur in cerebellar tumors; that is, fits of tonic rigidity. These are not cerebellar signs but are more in the nature of phenomena of decerebrate rigidity. Pyramidal signs, if present, usually involve the side contra-lateral to the tumor.

The differential diagnosis between cerebellar tumors and frontal lobe tumors used to be quite a difficult procedure. Many a neurologist has had the experience of advising exploration of the cerebellum only to find later that the tumor was in the opposite frontal lobe. Frontal explorations have been done in cerebellar tumors. There are several reasons for this confusion,—(1) the contra-lateral ataxia due to involvement of the fronto-pontine pathways; (2) corneal analgesia and anaesthesia which may occur on the homolateral side in frontal lobe tumors as well as in cerebellar tumors. However, if the possibilities of *X*-rays are exhausted in the differential diagnosis of frontal and cerebellar tumor, there is no reason for making such a mistake. The pineal gland, if calcified, is shifted to the opposite side in frontal lobe tumors. Furthermore, intra-dural air injections usually clear up the situation. In cerebellar tumors the air may not ascend at all if the tumor is large, and if it does ascend, both lateral ventricles are filled immediately, while in the case of frontal lobe tumors the homolateral ventricle will be diminished in size or entirely occluded.

The following case represents a fairly good example of a cerebellar tumor:

Patient was a white woman, age 23, who was admitted to the hospital complaining of nausea and vomiting and headache for a period of one and a half years. The appendix had been removed in an attempt to relieve the vomiting (It is rather interesting to note how often the teeth, tonsils, and appendices have been removed in an attempt to relieve symptoms of brain tumor which were not properly correlated with the correct cause). The patient noted that at times she wobbled when walking, especially if she had a headache. At other times, she showed no ataxia whatever. Vomiting was not projectile. When the patient was first admitted she had no subjective symptoms of headache or vomiting. It is interesting to note that she showed no ataxia at this time. However, two days later, during an attack of headache and nausea, she was quite ataxic. The neurological examination gave the following findings: bilateral choked disc; slight proptosis of the left eye; corneal analgesia on the left side; positive Romberg and ataxia during the period of headache; adiadocokinesis was not present; no hypotonia; no pass pointing; no nystagmus. Owing to the lack of ataxia and nystagmus, air injections were resorted to. About seventy cubic centimeters of air were injected into the spinal sac, until no more could be introduced. Plates were taken, but no air had entered the ventricles. Following this, Dr. Wm. Andrus did a ventricular puncture and introduced air. Following this procedure, the *X*-ray disclosed a marked internal hydrocephalus with marked increase of the size of the third ventricle. (Figure 3). Then the posterior fossa was explored and a large cyst containing about sixty cubic centimeters of fluid was evacuated. Patient had an uneventful recovery. In this type of case, air injection is particularly valuable.

CEREBELLAR-PONTINE ANGLE TUMORS

These tumors present quite characteristic symptoms. They are usually neuromas and usually arise from the eighth nerve, although at times may arise from the fifth and seventh nerves. They may be a part of the picture of Von Recklinghausen's Disease. The symptoms are as follows: tinnitus and early deafness which may precede the onset of the other signs by many years. Homolateral paralysis of the cranial nerves from the fifth to the ninth may be present depending on the size of the tumor. Vertigo and nystagmus are common symptoms. When the tumor attains a large size and presses on the cerebellum, cerebellar symptoms are added to the picture. Choked disc usually appear fairly late. These cases are sometimes quite amenable to surgery. It is interesting to note that many mistakes are made in diagnosing this type of tumor. I recall one patient who presented signs of bilateral choked disc, tinnitus and deafness with corneal analgesia on the right side, together with headache and vomiting. The case looked like an obvious one of cerebellar-pontine angle tumor. However, exploration disclosed absolutely nothing in the posterior fossa.

The following case is an excellent example of cerebro-pontine angle tumor:

Patient, white man, age 21, came to an oculist complaining that he could not see out of the right eye. He ascribed this to the fact that a few days before a gasoline stove had exploded burning his eyes. A bandage had been applied and when it was removed he discovered he could not see out of the eye. However, he probably had loss of vision some time before. He complained of headache and vomiting and was nauseated with the headache.

Neurological examination: bilateral choked disc, nystagmus on looking to the right, deafness in the right ear, loss of taste in the anterior two-thirds of the right side of the tongue. Patient fell to the right with his eyes closed and had a corneal analgesia of the right eye. Patient was operated by Dr. Heuer and an acoustic neuroma about the size of a walnut was enucleated. Patient made an uneventful recovery.

TUMORS OF THE PITUITARY AND ITS IMMEDIATE NEIGHBORHOOD

Tumors in this neighborhood produce characteristic signs which may be grouped under the heading of general and focal signs. The general signs include acromegaly, dystrophy, adiposo-genitalis, headache, somnolence, polyuria, polydypsia with disturbances of sugar tolerance, usually increased for sugar; an excessive desire for food may also be present. These general symptoms not only occur in pituitary tumors, but also occur in tumors in the infundibulum and anterior perforated space, or of the third ventricle. The focal symptoms are quite characteristic: Optic atrophy with bitemporal hemianopsia. Choked disc may occur in the late stages when the tumor has become large enough for it to encroach on the restricted size of the cranial cavity. The following case is an excellent example:

Patient, F. M., age 16, was seen through the courtesy of Dr. D. T. Vail, Jr. Patient showed an advanced optic atrophy in the right eye in which he was totally blind; some evidence of optic atrophy in the right eye in which he was totally blind; some evidence of optic atrophy in the left eye with temporal hemianopsia; weakness of the eye muscles inervated by the third nerve, with resulting failure of convergence. The remainder of the neurological examination was entirely negative for organic findings. The general physical examination disclosed an advanced condition of dyspituitarism. The patient was short and very obese, and showed feminine hips and legs, together with a feminine distribution of hair on the pubes. The basal metabolic rate was minus 20%. The patient showed an increased tolerance for sugar with a resulting flat type of sugar curve. An operation disclosed a tumor of the optic nerve and chiasma. The right optic nerve was as large as a man's little finger. The left optic nerve showed some involvement though not as marked as on the right. A section of the tumor showed it to be a neuroma. The pituitary was absolutely normal in this case.

It is interesting to note that this child had been treated in a behavior clinic for children for about eight years. During this time the vision had become progressively worse. He was treated for dyspituitarism because of his excessive appetite. It was noted that he ate a great deal, especially starches and candy, and would steal money from his parents in order to obtain candy. Although this patient had what is generally accepted as pituitary signs, there was no involvement of the pituitary in this case.

ANEURISMS

Aneurisms are slow growing, vascular tumors which occur most frequently at the base of the brain, but which may occur in any locality. The symptoms naturally depend on the locality. However, there may be no symptoms until rupture occurs. This condition is quite difficult to diagnose before autopsy. The aneurism may rupture and kill the patient, or a rupture with cessation of bleeding may occur; or the aneurism may even heal. The following case is an excellent example:

Patient, white, female, age 57, presented herself complaining of double vision which had existed for over a year. However, the day before coming to my office she stated that the left eyelid drooped suddenly; that she could not move the left eye in any direction, and that she felt weak all over, and could not use her right leg and foot. She had pain in the left side of the face which was quite severe. The neurological examination showed normal fundi; complete internal and external ophthalmoplegia in the left eye; ptosis of the left eyelid and proptosis of the left eye. The eyes could not be moved in any direction. She complained of pain in the distribution of the ophthalmic and mandibular division of the fifth nerve. Objective examination revealed hypesthesia in the realm of the fifth nerve, especially in the ophthalmic and mandibular divisions. There was a corneal anesthesia in the left eye. There was slight weakness of the left lower face; tinnitus in the left ear which she described as a roaring, buzzing noise, which was synchronous with the heart beat. It was later found that this tinnitus was increased when the blood pressure was elevated. The tinnitus could be diminished or caused to cease when pressure was made over the left carotid artery. There was a weakness of the right arm and leg together with positive Chaddock and Oppenheim on the right foot. The abdominal reflexes were diminished on the right side. A distinct, soft bruit, synchronous with the heart beat could be heard over the left eye-ball. A spinal puncture was performed disclosing no increased pressure and a normal fluid with the exception of an increase in globulin. The blood pressure was 190/110. It is interesting to know that the patient complained of double vision and pain in the fifth nerve for about one year before the onset of the internal and external ophthalmoplegia. The sudden onset of the ophthalmoplegia together with the involvement of the opposite side of the body were undoubtedly due to rupture of the aneurism. The patient refused any operation such as tying off the internal carotid.

It is interesting to know that the condition had improved slightly; with the establishment of some control of the muscles innervated by the third nerve and power to lift the eye-lid slightly. The tinnitus and bruit vary from day to day. When the blood pressure is high, around 190 to 200, the bruit can be heard and the tinnitus is described as a roaring noise in the left ear synchronous with the heart beat. On other days, when the blood pressure is low, the tinnitus is barely perceptible and the bruit cannot be heard.

The differential diagnosis of brain tumor is sometimes extremely difficult. Some tumors may go very many years with a diagnosis of idiopathic epilepsy or organic psychosis. One should always be suspicious of a diagnosis of epilepsy when the symptoms begin in the later years of life, and which is not accompanied by inflammatory or vascular disease to explain the cause of the epilepsy. Some of the cases reported in this paper are excellent examples of this. Furthermore, one should always be cautious in making a diagnosis of paresis or neuro-syphilis when the spinal fluid is negative, and when there is no history of the patient ever having had syphilis. In my younger days while serving at Longview Hospital, I had occasion to see a case which had been diagnosed paresis by an excellent clinician, but when the case came to autopsy a tumor of the frontal lobe was found. However, with the possibilities of *X*-ray and ventriculgrams, there should be little excuse for this mistake in the light of our present state of knowledge.

Jacksonian convulsions, particularly in young patients, are quite suggestive of brain tumor. Generalized convulsions which occur after middle life are also significant.

Choked disc is quite significant of brain tumor, but may occur in other diseases as I will presently show in the discussion of one case.

Especially is encephalitis to be kept in mind. Brain abscesses, after a very long latent period may occasion difficulty in diagnosis from pituitary tumor. Progressive softening of the brain, due to vascular disease in old people is frequently very difficult to differentiate from tumor.

Pseudo-tumor as originally described by Nonne

is usually due to serous meningitis and localized arachnitis which may simulate tumor very closely. Multiple sclerosis, if it begins with optic neuritis, with the first patch in the pons, may cause difficulty in diagnosis. I will give one excellent example of this later on.

The following cases are reported in order to show some of the difficulties which may arise in differential diagnosis of brain tumor.

(1) Multiple Sclerosis:

As noted above multiple sclerosis may occasion difficulties in diagnosis, especially if choked discs supervene. The following is an illustrative case: patient, M. J., age 16, was seen through the courtesy of Dr. D. T. Vail, Jr. Her chief complaint was loss of vision in the left eye which she had suddenly discovered about two days before but it may have existed for a longer time. It is a notable fact that patients may lose the vision in one eye without becoming aware of it at once. Three months before the patient noticed numbness and tingling in the left arm, which persisted for a time but finally both the left arm and left side of the body became numb as also did the left side of her mouth which she noticed whenever she brushed her teeth. Following this she experienced the sensation of numbness in the left leg which lasted about three weeks. There was no history of headache, double vision, or vomiting. She had no general or focal convulsions. She had attacks of emotional instability with alternate laughing and crying. There was no history of any acute illness such as encephalitis.

The neurological findings were as follows: the pupils were unequal;; the left was widely dilated, and did not react to light or accommodation. The right pupil reacted promptly. There was a choked disc in the left eye. No nystagmus was present. There was dissociation of sensation in the realm of the fifth nerve. The patient showed a hypesthesia to touch and a hyperaesthesia to pin pricks and painful stimulation. The corneal reflexes were absent in the left eye. There was a slight weakness of the left lower face. Sense of taste was slightly impaired on the anterior two-thirds of the tongue on the left side. The remaining nerves showed no abnormalities. The deep reflexes were present, hyperactive and equal on both sides. Epigastric and abdominal reflexes were present and equal on both sides. (It was interesting to note that the abdominals were not absent.) Motor power was normal. Sensory examination was normal except for the fifth nerve findings as above noted. There was no reversal of the plantar reflexes; no ankle or patellar clonus; coordination tests were excellent; Romberg was negative. There was no pass pointing; no ataxia; no dissociated movements of the arms and legs. The spinal puncture revealed a normal pressure, registering eight cubic centimeters of water and the fluid contained sixteen cells but was otherwise normal.

Dr. Heuer did an exploratory examination on the left side but no tumor was found. A week later the patient developed optic neuritis in the other eye, which gradually subsided. When seen three months later she presented slight optic atrophy of the left eye, but no other symptoms. This case is probably one of multiple sclerosis with initial onset in the pons.

(2) Encephalitis:

This disease occasionally is difficult to differentiate from brain tumor, if a choked disc is present, or if the patient is seen after the febrile symptoms have subsided. The following case report represents a good illustration:

Patient, white, female, age 38, was seen through the courtesy of Dr. Phinney. She had come to him because of slight visual disturbances. Ten days previously she had been quite ill with influenza (diagnosed by her family physician). At that time she had double vision and headache. At the time of the neurological examination, the patient presented no fever, but showed bilateral optic neuritis, double vision, weakness of the external rectus and slight weakness of the left lower face. Otherwise, the neurological examination was negative.

A spinal puncture was done showing no increased pressure; the fluid contained eight cells, a slight increase of globulin, a negative Wassermann and a negative gold curve. The discs returned to normal in about ten weeks, with absolutely no loss of vision. There is no doubt that this was a case of encephalitis.

(3) Pseudo-tumor:

We present this case as one of pseudo-tumor, although we realize the untenability of this diagnosis. The term pseudo-tumor was originally introduced by Nonne, who described a number of patients who described the general, and sometimes the focal, symptoms of brain tumor, which at operation showed no evidence of this. We now know that many cases were due to encephalitis, serous meningitis, and localized arachnitis.

Case: patient Mrs. C. S., age 54, was seen through the courtesy of Dr. D. T. Vail, Jr. Her chief complaint was blindness. The trouble began in the right eye with temporal field defect and progressed to the left eye. At the time of the neurological examination, there was no perception of light in the right eye. The left vision was reduced to a small patch of light perception on the nasal side only. There was no history of any finding of any toxic poisoning or nasal sinus disease. *X*-Rays of the sella were negative. The patient noticed that about two weeks ago both eyeballs felt sore. The following day she noticed black spots in the visual field of the right eye. Two days later the process began in the left eye. She did not complain of double vision but had pain in the right frontal and occipital regions. She had been subject to headache and nausea for many years. There was no history suggestive of encephalitis. The neurological findings were: bilateral choked disc—more so on the right; slight weakness of the left lower face; slight deafness in the left ear (probably a symptom in the nature of choked labyrinth); sensory tests normal. There was no aphasia or astereognosis. The deep reflexes were present and equal; abdominal reflexes were slightly diminished on the right side; no pathological reflexes. Coordination tests were normal. No extra-pyramidal or cerebellar involvement present. Touch, temperature, pain and vibratory sense were normal, as was motor power. A spinal puncture was performed; pressure was slightly increased, measuring about eighteen cubic centimeters of water. On examination there were no cells, normal globulin, negative gold curve, and negative Wassermann. The chiasmal region was explored and decompression was done by Dr. Heuer. The patient made an almost complete recovery of vision, in about three months time, and no further symptoms referred to the brain tumor developed.



Fig. 3. Encephalogram showing Internal Hydrocephalus with enlargement of Third Ventricle in Cerebellar Tumor.

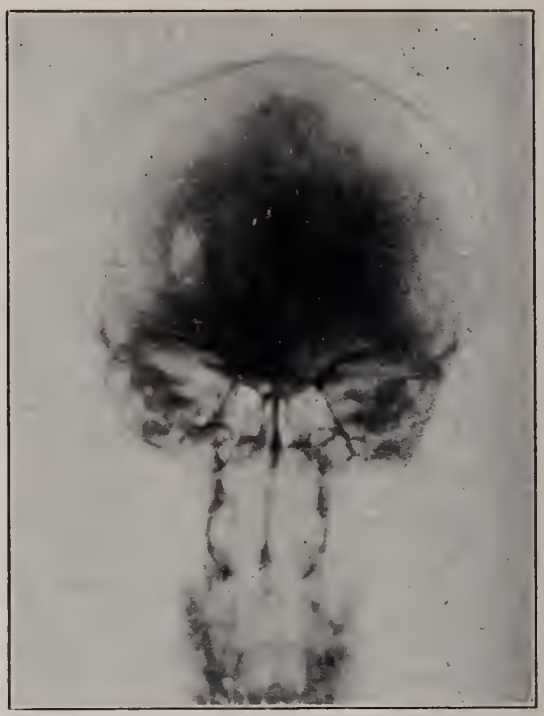


Fig. 4. Encephalogram showing failure of the Left Lateral Ventricle to fill with air in Left Frontal Lobe Tumor. Air injected by the lumbar route.

4) Cystic pituitary with abscess formation, with secondary meningo-encephalitis.

The following is one of the most unusual cases I have ever seen. Patient, white, female, age 39 was seen complaining of headache. She had had a mastoid operation about six weeks previously. She stated that the headaches were more severe in the region of the mastoid over the right side of the head but that she had been troubled with headaches for about ten years. There had been no unusual complications following the mastoid operation. There was no history of vomiting, delirium, convulsions, or double vision. A very careful ophthalmological and neurological examination failed to reveal any abnormality other than a slight weakness of the left lower face, which was within physiological limits. However, the patient presented a condition of dystrophia adiposo-genitalis, was considerably over-weight and showed marked myxoedematous deposits about the knees, ankles, shoulders and arms. She stated that this condition had been present for about ten years. The basal metabolic rate was interesting, being minus 30%. The sugar tolerance test was likewise illuminating, showing an increased tolerance for sugar with a flat type of sugar curve. The patient was told she had no organic disease of the central nervous system, and that the headaches were probably pituitary in origin. She was placed on glandular treatment with a prescription containing corpus luteum, thyroid and pituitary. However, the headaches did not improve and the patient's general complaints did not improve. I observed her for about six weeks as an ambulatory patient, then advised her to go to a hospital for observation. The first night at the hospital she had fever of 101°, pulse 60. Of course the possibility of brain abscess had been kept in mind all along, and with this disturbance of pulse and temperature this diagnosis became more probable. Dr. Hoppe and Dr. Heuer examined the patient and found no abnormalities in the neurological examination. Dr. Horace Reid's examination of the eye-grounds and visual fields was normal. After being in the hospital about four days, the patient complained of pain in the right ear. The otologist discovered that the right ear drum was bulging. This was incised and a serous fluid escaped. The temperature after this procedure became normal for about two days, but later rose between 101 and 102°, with a pulse range of from 60 to 72 while the fever was on. The patient complained bitterly of headache. Following the paracentesis, the patient developed choked disc, beginning in the left eye and finally appearing in the right eye. Double vision appeared and the patient became quite somnolent and developed a ptosis of the left eyelid, together with weakness of the left lower face. The spinal fluid contained 30 lymphocytes and there was an increase in pressure. The clinical picture now resembled that of lethargic encephalitis. The somnolence deepened and the patient became practically comatose. She remained in this condition about one week, when it was decided to explore the temporo-sphenoidal area on the side of the operation, in the hope of finding an abscess. She had shown no cerebellar manifestation and as the mastoidectomy was on the right side, a right temporo-sphenoidal lobe exploration was done but no abscess was found. The patient continued to be alternating somnolent and comatose for about ten days after the operation. She finally died of a respiratory failure. Autopsy revealed a most interesting condition. There was a localized patch of meningitis with greenish pus extending from the root of the third to the root of the ninth nerve on the left side. When the brain was removed it was noticed that the floor of the sella was bulging. The pituitary was dissected out and found to be

greatly enlarged in size, to be cystic, and the pituitary cyst was filled with greenish pus such as was observed on the roots of the third nerve. The floor of the sella was soft, and a probe could be easily passed through it into the sphenoid sinus.

In this patient we were dealing with a cystic pituitary which had produced general signs of dyspituitarism for ten years. This cystic pituitary, instead of being extra-sellar had eroded the floor of the sella and become secondarily infected from the sphenoid sinus and had given rise to a basilar meningitis. The mastoid operation had nothing whatever to do with the condition. This case could be considered as one of meningitis, or as tumor, or abscess of the pituitary.

(5) Cerebral hemorrhage:

Brain tumor must sometimes be differentiated from cerebral hemorrhage, either traumatic or spontaneous. The delayed sub-dural hemorrhage can produce generalized and focal symptoms very similar to those of brain tumor, and a diagnosis can only be made by an exploratory operation. When hemorrhage occurs into the tumor the differential diagnosis from ordinary cerebral hemorrhage is quite difficult. For example: A patient was admitted to the neurological service of the General Hospital with all the symptoms of cerebral hemorrhage—sudden loss of consciousness, hemiplegia, blood in the spinal fluid. A diagnosis of cerebral hemorrhage was made. The patient died and autopsy revealed a large glioma of the frontal lobe in which hemorrhage had taken place. A later history was obtained of mental deterioration in this patient for a period of about two years.

(6) Diffuse Sarcomatosis or Gliosis of the cerebro-spinal meninges.

These conditions may occasion great difficulty in diagnosis. These cases receive scant attention in the text books. Recently I have seen two such cases, and they are probably more frequent than we realize. Oppenheim calls attention to the fact that such conditions produce symptoms resembling those of brain tumor, as well as those of generalized meningitis. A careful examination of the spinal fluid may sometimes reveal the presence of tumor cells and point the way to a correct diagnosis. This type of case emphasizes the value of making careful differential smears of all spinal fluids examination. The following case is an excellent one of diffuse gliomatosis of the meninges:

Patient Mr. I. S., age 40, was seen through the courtesy of Dr. Geo. Heuer. His chief complaints were weakness in the arms and legs which he had noticed since December 1, 1929. At the time of the examination he did not complain of headache. He complained that he was slightly nauseated after eating; that phlegm collected in his throat. Examination showed a collection of mucous in his throat which caused him to gag and vomit. He had been employed until October 1929. He did not notice any symptoms of illness before that time. The first symptoms had been headache and double vision, but he did not notice any fever, but complained of pain between the eyes. When he saw double the images were one above the other. He had had several teeth pulled without relief. He had pains in the back of his neck, shoulder and arm, and was given arsenic injections for this. About six weeks ago he began having hiccough, of which he had several attacks. He then began to complain of rather severe pain in the arms and hands with loss of use of the legs which became so weak that he could not walk. He had several attacks closely related to fainting but did not actually faint; turned a green color and perspired

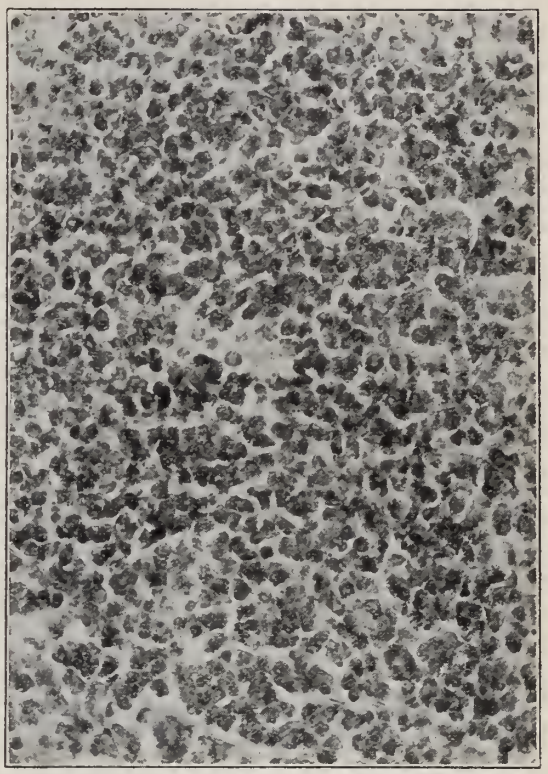


Fig. 5. Section from area of Diffuse Gliosis of Central Nervous System.

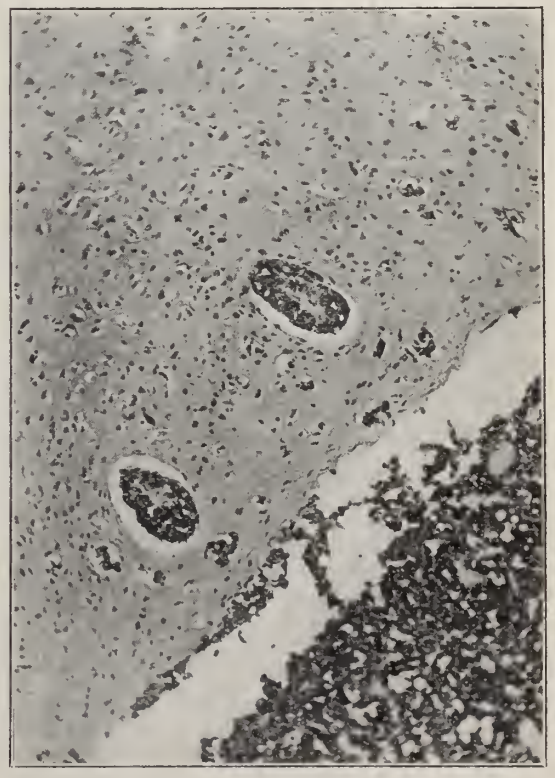


Fig. 6. Section of Melano-Sarcomatosis of Brain and Meninges.

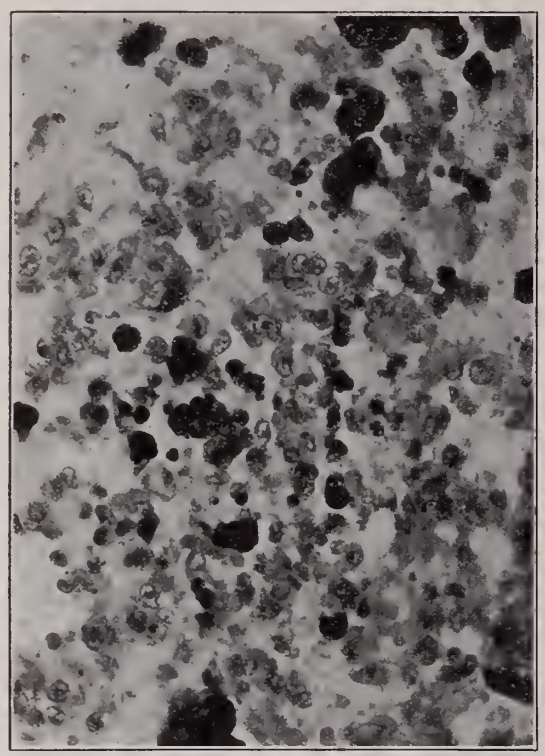


Fig. 7. High Power section of Melano-Sarcomatosis of Brain and Meninges.

excessively and became very weak during these spells.

About February 5, the patient became unconscious. His eyes rolled back in his head, he frothed at the mouth, bit his tongue but there were no focal symptoms during this convulsion. His wife stated that he perspired very profusely. It was stated that at the beginning of the illness, the patient weighed over 200 pounds, whereas he now weighed about 155 pounds. The neurological examination was as follows: examination of smell normal; bilateral choked disc with hemorrhages throughout both discs; pupils unequal, the left larger than the right; pupils reacted to light and accommodation; limitation of lateral movements in both eyes. Both external muscles were weak; nystagmoid movements were noted on lateral vision, especially towards the left; poor convergence on near vision; internal strabismus of the right eye. The fifth cranial nerve was practically normal in both the motor and sensory divisions. The seventh nerve showed marked weakness of the left lower face, probably lower motor neuron in type. Hearing was diminished in both ears, more on the right. Movements of the larynx were normal; pharyngeal reflexes were normal although the patient had difficulty in swallowing and at times regurgitated fluids through the nose. The tongue deviated to the right with a fine tremor. The deep reflexes were not elicited; abdominal reflexes and cremasteric reflexes were likewise absent. There was no reversal of the plantar reflexes; no ankle or patellar clonus. There was no Romberg or ataxia. Sensation was normal with the exception of tenderness over the nerve trunks and muscles. Motor power was diminished in both hands; practically gone in the right. There was marked atrophy of the inter-ossei, thener and hypothener muscles of both hands, especially the right. There was generalized atrophy of the muscles of both arms and legs. There was weakness of the anterior tibial group on both sides, with a resulting foot drop more so on the left side. Electrical reaction showed diminished reaction to the Faradic current in both arms; the musculo-spiral, median and ulnar nerves showed slight response in the right arm.

A spinal puncture was performed, the fluid being under marked increased pressure rising over the top of the manometer. The fluid was greenish yellow and contained 600 white cells. A smear of these cells showed the presence of tumor cells. The nurse reported that the patient had Cheyne-Stokes' respiration when he slept at night. There was a tumor mass in the right temporal muscle. Exploratory operation was done over the right temporal region and when the dura was turned down there was a layer of tumor tissue extending over the brain as far as one could see. A small patch of this was removed and on section showed a rapidly growing glioma. (Figure 5.) The tumor cells evidently had infiltrated the entire central nervous system producing a polio-encephalomyelitis with the clinical nervous signs of general increase of pressure and peripheral nerve findings due to involvement of the roots of the cerebrospinal nerve.

Diffuse melano-sarcomatosis of the brain and the meninges:

Patient; white man, age 48, was admitted to the General Hospital with what was apparently a case of encephalitis. The onset had begun a week before with double vision and fever. Patient showed bilateral choked disc, was quite somnolent when admitted to the ward, showed neck rigidity and bilateral Kernig sign. Spinal fluid was blood tinged and contained white cells which were out of proportion to the amount of blood present. A diagnosis of hemorrhagic encephalitis was made. Patient died 48 hours after admission to the hospital. The autopsy disclosed a diffuse melano-sarcomatosis of cerebral and spinal meninges. The tumor cells followed the blood vessels into the brain, medulla, cerebellum, and spinal cord. (Figure 6 and 7.)

Encephalo-malacia.

Patient; a white woman, age 66, complained of dizzy spells and loss of vision. She also complained of headaches both frontal and occipital. She had had a stroke about three years ago which involved the left side of the face with no loss of consciousness. Neurological examination showed a horizontal hemianopsia with loss of vision in the lower halves of the field. There was a slight ptosis of the left eyelid, slight weakness of the left lower face. She presented a condition of mind blindness. For example, when she closed her eyes she could not remember any of the ordinary articles in her dressing room with which she had been familiar for twenty years. Deep reflexes were slightly exaggerated on the left side. Spinal fluid was under a slight increase in pressure but was negative. The vision became progressively worse and the patient was advised to have the exploration of the occipital poles of the brain which she did. She did not do well during the operation and the operation was discontinued before conclusion. She died within 24 hours and the autopsy disclosed bilateral areas of softening of both calcrine fissures. Diagnosis encephalomalacia.

19 WEST 7TH ST.

The Diagnosis and Control of Undulant (Malta) Fever

PAUL F. ORR, M.D., Perrysburg, Ohio

THIS disease has been known for many decades, the first accurate description being published in 1863. It was not until twenty-four years later, however, that a small micrococcus was discovered as its cause by Bruce and named *Micrococcus melitensus*. Until recently the disease was believed to occur largely in countries bordering on the Mediterranean Sea, many cases occurring particularly on the Island of Malta from whence the name of the disease.

A comprehensive report of the British Commission appointed to study this disease in 1905 has shown very conclusively that this disease in man was contracted from infected goats. It was further shown that the disease in goats caused abortion but that apparently normal animals harbored the infection in their system. Over 50 per cent of the goats examined on the Island of Malta were found to be infected although many of the goats appeared not to be abnormal. The organism causing the disease was isolated in large numbers from the milk and urine of many of these infected goats. It was conclusively shown that the disease in man was contracted through the drinking of this infected goat's milk.

Craig in 1905 reported the first definite case of Malta fever in the United States. This case occurred in Washington but the source of the infection was not definitely ascertained.

A number of cases of Malta fever have occurred in the United States and particularly along the Mexican border where the cases were definitely traced to infected goats.

In 1918 Miss Evans of the United States Public Health Service discovered that the organism, *Micrococcus melitensus*, causing Malta fever and commonly isolated from goat's milk, was practically identical to the organism, *Bacillus abortus*, causing contagious abortion in cattle and other animals. Miss Evans showed through her work that these two organisms differed so slightly that they should be classed only as sub-varieties of the same species. She stated in 1918 that "Considering the close relationship between the two organisms and the reported frequency of virulent strains of *B. abortus* in cow's milk, it would seem remarkable that we do not have a disease resembling Malta fever in this country."

This prophecy of Miss Evans was fulfilled six years later when Keefer reported a case of this disease in Baltimore which was shown to be due to the type of organism causing contagious abortion in cattle. There had been no contact of this patient with goats or goat's milk at any time. It was brought out, however, that the patient was drinking large quantities of unpasteurized cow's milk. In that paper Keefer formulated the following question: "May not the occasional infection of this kind arising sporadically in an area where there are no goats, be due to drinking cow's milk?"

Since the publishing of Keefer's paper on Malta or undulant fever, over 1000 cases of this disease have been reported in this country. In other countries, particularly Italy, Belgium, and various parts of Africa, many cases have been recognized and the causative organism was found to be the same as the one causing contagious abortion in cattle and other animals.

The common etiology of the abortion disease in animals and of undulant fever in man has been proved without question. Not only can the abortus organism be isolated regularly from the blood and urine of man infected with this disease, but also the same organism recovered from a human case when injected into pregnant cattle gives the typical clinical syndrome of contagious abortion, that is, expulsion of the fetus and subsequent invasion of the udder of the cow.

It is the primary purpose of this paper to discuss the clinical aspects and diagnostic features of this disease as well as methods of control based on epidemiological studies.

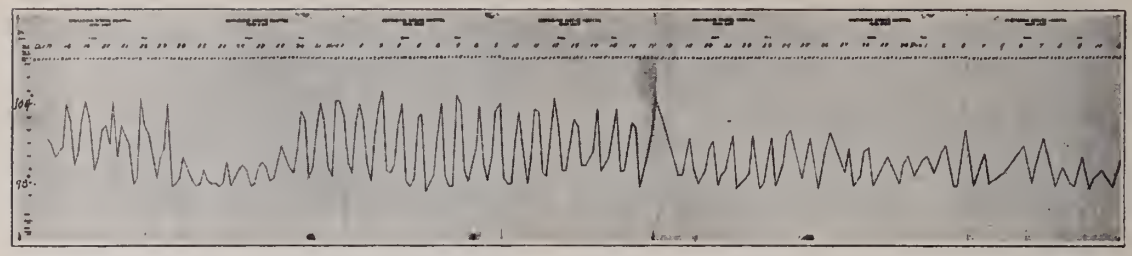
Previous to 1926, very few physicians in this country were familiar with this disease. This was due primarily to the fact that it was not realized that such an infection in man occurred in this country. During the past four years, however, published reports show that wherever the disease has been investigated, many cases have been found and that instead of being a rare disease it is very common and that cases in the past have gone unrecognized. It has been my experience during the past four years that whenever the disease has been called to the attention of practicing physicians these men have begun to recognize cases among their own practice, and if through the discussion of the clinical aspects of this disease I can stimulate some interest on the part of physicians of Ohio in the recognition of such cases among their practice, the object of this paper will have been fulfilled.

TYPES OF CASES

In our study of undulant fever the cases have fallen into three types:—1st, the ambulatory type, 2d, the intermittent or undulating type and 3d, continuous or non-undulating type.

Only a small per cent of our group of cases has fallen in the "ambulatory type". In these cases the symptoms are very mild and the patient is not necessarily confined to bed at any time. The temperature reaches a maximum of 100 or 101 degrees, and there may be no definite symptoms other than a feeling of malaise with perhaps some

Read before the Section on Public Health and Industrial Medicine, Ohio State Medical Association, at the 84th Annual Meeting, Columbus, May 13-15, 1930.



Temperature Curve of a Typical Case of Undulant Fever.

headache and loss of appetite. This condition continues for a period of two or three weeks with a very gradual recovery.

The "intermittent or undulating type" is the typical, textbook picture, or so-called Malta fever. The symptoms in this type do not differ from those in the third or "non-undulating type", the only difference being that the patient has a series of attacks and remissions whereas in the "non-undulating or continuous type" there is only one attack and this lasts as a rule, in our experience, for a period of from six to eight weeks followed by gradual recovery.

The largest per cent of our cases has fallen in the latter or continuous type. In the undulating type the attacks are usually more severe and of long duration at first. The temperature which frequently goes as high as 103 degrees, persists for a period of ten days or two weeks at first, followed by a remission of only two or three days' duration. The symptoms in subsequent attacks become milder in character and of shorter duration, so that in some cases, which have continued throughout a period of one year, the attacks last only two or three days, and the symptoms consist of moderate headache, malaise and temperature of only 99 or 100 degrees. The remissions, on the other hand, are of longer duration so that after the course of several months, they may last for two or three weeks.

Cases of this type have been followed for over a period of a year and while the patient after that period of time, is able as a rule to do his usual routine work he is far from normal and complains of being generally run-down. In the continuous type where the symptoms and fever last for a period of from six to eight weeks, complete recovery follows the termination of the fever after a period of from two to four weeks.

DISTRIBUTION OF CASES

In our experience, the disease is nearly three times as prevalent in males as in females and this sex incidence has been confirmed by other workers.

In age distribution, the mode occurs in the group from 30 to 40 years, with a smaller number occurring above 40 years and from 10 to 30. In our experience, only one case fell in the first decade of life, and this has been the experience of most other investigators.

While more cases occurred among farmers than among individuals of any other occupation or profession, the disease does not limit itself to any occupational group. Besides farmers and dairy men, cases occurred among mechanics, housewives, school children, insurance brokers, merchants, architects, bankers, clerks and factory superintendents. In our cases, none of the patients worked around slaughter houses or meat markets.

TYPE OF ONSET

The type of onset is variable. The largest group, however, shows a gradual or insidious onset. Careful questioning in many cases brings out the fact that the patient has been run-down or has lost some weight and has had slight malaise over a period of several weeks or, in some instances, several months, prior to the development of definite symptoms. In some cases, the onset is more rapid covering a period of only one or two weeks during which time symptoms progressively become more marked.

CLINICAL DIAGNOSIS

In making a clinical diagnosis of the disease very little assistance can be obtained from physical examination. However, the symptomatology, if carefully obtained, enables one to make a fairly definite diagnosis in a large percentage of the individuals. In our experience, the most outstanding symptoms are the type of fever, the occurrence of sweats and the marked nervousness of the individual and an important diagnostic feature also is the general well appearance and well-being of the individual, considering the relatively high fever and the long duration of the illness. The patient may run a temperature of as high as 103 degrees and for a period of several weeks, yet the patient's facies remains little changed from that of normal, the tongue may not be furred, the breath foul, nor is there any sordes or other indications of a marked toxemia. This is an important feature in the differential diagnosis from typhoid.

Our cases of the undulating and continuous types have shown a rather characteristic diurnal temperature variation. On arising in the morning, the temperature may only be 99 or 100 degrees, while during the afternoon it begins to rise and during the later afternoon and evening, the fever frequently runs to 103, rarely to 104, degrees. This diurnal variation occurs during the onset as well as during the height of the disease

and during the recovery. With this diurnal variation there is similar variation in the severity of symptoms. The patient on arising in the morning generally feels well enough to get up and in many cases to do his usual routine work. During the course of the afternoon, however, headache and backache appear or become more severe. The patient feels chilly and rigors of varying degree of severity occur in a large per cent of the patients, usually during the later afternoon or at night, shortly after the patient has gone to sleep. Profuse sweating occurs in a large per cent of the individuals and close questioning will bring out the fact that the sweats are very odiferous.

Marked nervousness has been particularly noted in most of our cases, so much so that in several instances a diagnosis of hyperthyroidism had been made by the attending physician. In these cases of marked nervousness, a course tremor of the fingers is to be noted.

The patient complains as a rule of insomnia especially during the height of the illness. Neuromuscular pains are frequently noted and together with the nervousness are largely accountable for the insomnia.

There is a progressive and rather marked loss of weight, in many instances, amounting to from 20 to 30 pounds over a course of several weeks. With this loss of weight, the patient complains of an associated and rather marked weakness.

Bronchitis of a rather mild degree has been noted in about 30 per cent of our cases and in some this was only present during the first week or two of the ilness while in others it has persisted in a rather marked degree throughout the illness.

Epistaxis has occurred in less than 20 per cent of our cases but in those individuals there has been frequent recurrence of this condition.

In the male individuals we have noted the presence of orchitis in about 8 per cent of the cases. This orchitis is usually of a mild character and of short duration, in some instances, lasting only three or four days.

In less than 1 per cent of the cases have we noted definite joint involvement, including redness and swelling.

Constipation is the rule. However, in many cases the bowels may be entirely normal. In a few cases a moderate diarrhea of a few days' duration has been noted at the onset of the illness.

In several of our cases jaundice of a mild degree has been noted with a diagnosis of catarrhal jaundice having been made previously.

PHYSICAL SIGNS

As previously noted, physical examination is essentially negative. Various workers report a fairly high percentage of cases in which the spleen is enlarged, but in our group only about 15 per cent have shown this condition. We have noted, however, that the reflexes are as a rule hyperactive.

Previous to the recognition of Malta or undulant fever as a clinical entity, these cases have undoubtedly been wrongly diagnosed or have been classed with that large group of so-called undiagnosed fevers. In our group of cases, a primary diagnosis of typhoid fever had been made in 40 per cent of the cases, influenza had been diagnosed in 20 per cent, tuberculosis in 15 per cent and diagnoses of hyperthyroidism, catarrhal jaundice and streptococcus sore throat as well as Addison's disease have been made.

CLINICAL PATHOLOGY

Clinical-pathological examinations are of marked importance in the confirmation of the diagnosis of this condition.

An agglutination test, using blood serum from the patient should be performed in every instance. During the first week of the illness a negative test may occur but as with typhoid fever, a positive agglutination is usually obtained after the first week. The titer during the second or third week, in our experience, runs from 1:160 to 1:500. Later in the disease this titer may be gradually increased, and in one of our patients, the agglutination titer went as high as 1:20000. I have known of only one other instance in which the titer was noted as high as this. Sturgis at Ann Arbor in a personal communication stated that they had found an agglutination titer of 1:22000. In some instances, a very low titer of 1:10 to 1:50 has been recorded in active cases but I think that this is rather the exception.

In our experience a titer of at least 1:320 is diagnostic of the disease.

Following recovery the agglutination titer drops and in patients whom we have followed for two or three years after the termination of symptoms, the titer has been found to vary from 1:20 to 1:80. On this basis, titers of under 1:100 may indicate a past infection.

A white blood count generally shows a leukopenia. The count varies from 2,000 to 6,000, the differential count showing a relative lymphocytosis. In a case which was seen just a few days ago there was a slight leucocytosis with 70 per cent of polymorphonuclears. This was a case of a woman who developed symptoms of undulant fever shortly after delivery of a full-term and living infant. In this case the leucocytosis was probably associated with the obstetrical condition of the patient.

Blood cultures and urine cultures have been obtained in a large per cent of our cases, the laboratory work being done by Dr. Huddleson who has had many years of laboratory experience with this type of organism. As a rule positive cultures are difficult to obtain and a negative culture should not be considered of importance.

SOURCE OF INFECTION

All of the organisms isolated from our series of cases have been of the bovine type. In no case

was there any association with hogs. All of our patients used unpasteurized milk, and in about 70 per cent of the cases definite evidence of contagious abortion in the cattle supplying the milk for these patients, was obtained. Not only have the herds supplying milk to these patients, been found to be infected with contagious abortion but also the organism was isolated from the milk which was used in supplying these patients.

None of the cases which we have studied have ever had any association with goats nor have the patients at any time of their lives used goat's milk.

Reports from certain sections of this country seem to indicate that the source of some cases of undulant fever is traceable to hogs.

There are also some reports in which the type of organism isolated from a human case has been porcine rather than of the bovine type. It is to be noted, however, that in some cases which were carefully investigated the infection while of the porcine type came from infected cattle.

I believe the preponderance of opinion, including the extensive researches of Carpenter of New York and Simpson of Dayton, confirm our own belief that the source of infection of most of the cases of undulant fever in this county is from unpasteurized milk.

The control of this disease, therefore, depends largely upon the pasteurization of milk for human consumption. While there may be a small per cent of cases that will occur from direct contact with cattle or hogs, upon pasteurization of milk for human consumption depends the control of this disease.

In support of this statement I might add that during the past two years we have been on the look-out for cases of undulant fever in Toledo, and during this time only one case has occurred. The source of this case was apparently outside of the city of Toledo. It is to be noted that all of Toledo's milk supply is pasteurized, except a fraction of 1 per cent which comes from a certified herd which is free from contagious abortion.

Survey to Determine Use and Quantity of Narcotics

A nation-wide survey of all diseases in which narcotic drugs might be used is being undertaken by the U. S. Public Health Service for the purpose of determining the degree of use of narcotics not only under normal conditions, but also under abnormal conditions such as recent influenza epidemics when the demand for narcotics for professional use was greatly increased.

The Public Health Service plans to obtain information in all parts of the country on such diseases as colds, bronchitis, coughs and advanced stages of tuberculosis and cancer, in the same way as communicable diseases are reported at the present time, hoping that the result will furnish an accurate idea of the amount of narcotics necessary for legitimate use in the United States.

Officials of the Service have pointed out that a normal supply of narcotics must be kept available at all times and at the same time a reserve supply must be in the hands of manufacturers for emergency use.

The idea of such a survey originated at a recent conference held at Washington between officials of the Public Health Service, directors of the new Bureau of Narcotics of the Treasury Department and representatives of the various professions and industries engaged in the legitimate use of narcotics.

It was brought out at the conference that under the narcotic laws passed at the last session of Congress, the Bureau of Narcotics has the authority to limit and curtail the legal importation of habit-forming drugs in an effort to curb illicit trading in drugs, but that federal authorities were desirous of knowing as nearly as possible what the legitimate needs of the nation are so that any curtailment that might be made on imports would not endanger the supply necessary to allay suffering in the treatment of diseases and injuries and further scientific investigations.

A six-cornered program was mapped out, according to press reports of the conference, as follows:

1. Detailed scanning of prescriptions to determine ill-advised dispensing of narcotics.
2. Analysis of records of persons dispensing narcotics.
3. Analysis of sale and use of so-called exempt preparations sold without prescription.
4. Studies of morbidity and mortality.
5. Analysis of hospital records to determine normal medical and scientific requirements.
6. Institution of an educational program to reduce the demand for narcotics where unnecessary.

Further conferences have been planned at which the data obtained in the various surveys will be discussed and tabulated.

NEW BOOKS

Mental Aspects of Stammering. By C. S. Bluemel, M.A., M.D., L.R.C.P. (Lond.) M.R.S.C. (Eng.) Clinical Instructor in Neurology at the University of Colorado School of Medicine. Neurologist on the attending staffs of The Children's Hospital, The Denver Orphan's Home, and St. Luke's Hospital, Denver. The Williams and Wilkins Company, Baltimore, publishers.

A Synopsis of Medicine. By Henry Letherby Tidy, M.A., M.D., B. Ch. (Oxon.), F. R. C. P. (Lond.), physician to St. Thomas' Hospital; Consulting Physician to the Royal Northern Hospital; formerly Assistant Clinical Pathologist and Medical Registrar to the London Hospital. Fifth edition, revised and enlarged. William Wood and Company, New York.

The President's Page

A Personal Communication to the Membership from

C. W. WAGGONER, M.D., Toledo

Those who have had the opportunity and privilege of listening to or reading some of the addresses delivered within the past two or three years by recognized leaders of organized medicine and men of high executive and professional standing were no doubt impressed with the similarity of the keynotes sounded by these students of medico-social problems.

In the opinion of one who has tried to keep himself posted on some of the suggestions made by these leaders of our profession concerning the trend of the times as it affects the practice of medicine, the one point that stood out in their discussions and was emphasized and reemphasized, was the need for maintaining compact and efficient organization of the medical profession.

The conditions of the times have made it necessary for the development of a militant spirit among the physicians of the nation. This spirit cannot be developed and maintained unless efficient medical organization is continued and constantly strengthened.

Medical organization, the kind through which medical thought and medical leadership can best be expressed, is only obtained through a strong, active medical society as a local unit cooperating with the State Association in state-wide problems and an active State Association working in harmony with the American Medical Association in problems and policies of a national aspect.

Last month, I discussed some of the benefits derived by the individual physician from membership in organized medicine, pointing out particularly a few of the advantages gained by the physician through membership in his county medical society and his affiliation with our state and national organizations.

My purpose in the following paragraphs is to reemphasize to the members of the State Association a few of the responsibilities that accompany membership in organized medicine and summarize some of the obligations each and every physician owes to his county medical society, and incidentally, the State Association and the American Medical Association.

It is obvious that the fundamental and basic factor in strong and efficient medical organization is the county unit. The same is true in any organization of state-wide scope. Civilization itself is founded on cooperation and on a realization of community obligations. The modern political structure is reared upon the community as a local unit. So, unless each and every county medical society in Ohio functions in the most efficient manner possible, the State Association is certain to be less capable of discharging its obligations to the profession in general, and to the public at large.

While from a scientific and professional point of view, the strength of a county medical society does not depend upon mere numbers, in many respects the number of members constituting the society, especially in comparison to the number of physicians in the community, does become a matter of primary importance.

It seems to me that it is the duty of the members of every county society, especially the officers, to ascertain as the dawn of a new year approaches, whether the society has enrolled every eligible, qualified and worthy member of the medical profession in the community. The membership of every society should be brought up to the limit of possibility and proper methods to enlist all those who are eligible and worthy should be instituted. Since membership dues to the State Association are due on or before January 1 of each year, there is no better time than the present month for making an inventory of the physicians of the various communities and carrying on a quiet membership campaign, if one is found to be practical and wise.

The matter of selection of officers to guide the destiny of the county unit seems to me to be a most important responsibility resting on the shoulders of each individual member of the sosiety. Every member should make it a point to have a voice and a vote in the election of his society leaders. Nominees for the various offices should be carefully chosen. It is up to the membership at large to pick the right men for the key positions in organization activities.

For the office of president, in my opinion, the county society should select a man popular with his colleagues, of recognized ability as an organizer and leader, of unimpeachable reputation as a physician and citizen, and a man interested in community and civic problems. Similar attributes should be possessed by those elected to the other offices.

It is especially important and vital that a man possessing outstanding qualifications be selected as secretary, for, as has often been said, the life and activity of the county medical society depends largely upon its secretary. He should be one

alert and active in, and enthused over the possibilities of, medical organization; he should be a man ready and willing to face the important responsibilites of his office; he should be a man capable of obtaining and retaining friendly and cooperative contacts between the county society and other organizations of the community, and in many respects, he should be a born diplomat. We have heard it said on more than one occasion that a county medical society is likely to be as good as its officers.

Another factor in local medical organization that cannot be over-emphasized is that having to do with the personnel and work of the various committees. The mistake of having too many committees should, in the first place, be avoided. Every committee appointed should have a definite purpose and it should be given to undertsand that the society expects it to deliver the goods.

The personnel of committees should be selected carefully, for a poorly-chosen committee can often create difficulties in organization procedure. Members named to committee positions should serve cheerfully and conscientiously, giving the best they have for the good of their society and the profession.

The formation of proper contacts and relationships by the various committees with outside agencies and with the committees of the State Association can be of distinct value, not only to the organized profession, but to the general public as well. Largely through the activities of its committees is organized medicine able to lead the way in problems affecting the public health and the practice of medicine. As in the case of the officers of the county society, the committeemen must be qualified in such a manner that the public has no reason to doubt that they express the best thoughts of the profession.

If a county society expects to make itself a leading factor in its community and hopes to discharge its responsibilities toward organized medicine, it should hold regular and fairly frequent meetings. A society that holds but one or two meetings during the year cannot possibly keep step with moving events, cannot be relied upon to function when its services are needed and cannot hope to retain the interest of the medical profession of the community. Meetings should be held at least once each month, except possibly during the summer vacation period.

On the other hand, the mere holding of meetings is not enough. Every physician should regard it an obligation to be present at the regular meetings of his county medical society and take part in the informal discussions during the program. He should consider his obligation to his county medical society as superior to that which he may owe to various other medical, scientific or outside organizations or agencies.

There comes to mind at this time the important part that a well-balanced, interesting and educational program for the year plays in the success of medical society activities. One leader in medical organization has been quoted as saying that one of the best methods to kill a county society is to have a few meetings and disappoint the members with an inadequate, worthless program.

Every time a physician attends a meeting of his county society he expects, and has a right to, to add to his store of knowledge and to derive some pleasure or social enjoyment. Of course the officers and program committee cannot do it all and they must have the active cooperation of all members of the county society to make the programs a success.

However, those in charge of arranging programs should make an effort to make each one of general interest and a medium for giving the entire membership something of benefit to the individual physician. Comprehensive reviews and analyses of the newest developments in the fields of curative and preventive medicine should be scheduled. Certain meetings during the year should be devoted to discussions of public health problems. Special plans should be made for symposiums or addresses on the social and economic problems affecting public health and medical practice. Reports and bulletins from the Headquarters Office of the State Association, pertaining to the activities of the State Association officers and committees and soliciting local cooperation should be reviewed at the meetings.

Such meetings are possible providing the individual members of the county society are willing to assume a personal responsibility in them and to cooperate with the officers and program-drafters.

Numerous other responsibilities resting upon the individual physician in his affiliation with organized medicine might be enumerated. It is quite likely that the great majority of the members of the State Association are aware of these obligations and that all that is needed is a reemphasis and reiteration from time to time to arouse them into action and to a realization of the debt they owe their medical society. This is, in the last analysis, largely one of the important functions of the leaders of the county medical society. Organized medicine in Ohio, strong as it actually is, can be made a more potent factor, both in the interests of the public and the medical profession, if a bit more initiative, activity and enthusiasm is displayed on the part of those county medical societies that are somewhat inclined to rest on their oars and let someone else row the boat.

In closing, I deem it a privilege and honor to be given this opportunity to extend to the members of the Ohio State Medical Association the heartiest of Christmas greetings and the best of wishes for the New Year.

Medical Economics Survey in West Virginia Summarizes Interesting Findings on Incomes, Collections and Specialties

An economic survey of the medical profession in West Virginia was recently completed by the West Virginia State Medical Association in an effort to obtain accurate and authentic information on some of the outstanding economic questions confronting the medical profession generally.

Seventy-five of the questionnaires sent to members of the West Virginia Association were returned, serving as a basis for the interesting conclusions summarized in the final report on the survey.

Among the important points determined by the survey were:

That the active practitioners of that state, numbering approximately 1,500, collect a total of $10,455,162 annually, of which $8,314,923 is net income.

That the average net income of the West Virginia is $6,414.43 a year.

That the general practitioner's income exceeds that of the "contract" physician.

That charity work done by the medical profession of that state amounts to approximately $1,548,864 annually.

"Out of the $10,455,162 collected by the West Virginia doctors, the sum of $2,140,139 is paid for office rent, assistants' salaries, etc., leaving an annual net income of $8,314,923. Figuring on this basis, the average net income of the West Virginia doctor is $6,414.43 a year. The surgeons are the highest paid of any branch of the profession, averaging $9,864.50. *X*-ray specialists are the lowest paid, averaging $4,000 a year. Between these two extremes come the dermatologists, averaging $9,800; the obstetricians at $9,700; the eye, ear, nose and throat specialists at $7,664.61; the internists at $7,811.60; the urologists at $6,428.57; the pediatricians at $5,812.50; and orthopedists at $5,990, and the general practitioner at $5,235.26. Of the smaller groups practicing special branches of medicine are the proctologists at $7,500, the psychiatrists at $4,100, and the public health workers at $3,933. The average income of the 'contract' doctor is $4,166, or slightly less than that of the general practitioner.

"The survey conducted by the West Virginia State Medical Association is the first attempt ever made to secure an exact estimate of the costs of medical care in this state and one of the first surveys of its kind ever made in this country. The survey was conducted by means of the recent questionnaires, and approximately three months were required to carry out the work and assemble the statistics. All of the figures given above, and those that follow concerning average gross and net incomes, are mathematically correct, having been averaged from the actual figures furnished by the questionnaires. The remaining figures and statistics concerning total gross and net incomes, charity work, etc., are not mathematically correct, but they are as nearly correct as it is humanly possible to get them. In arriving at the total gross and net figures, the total number of returned questionnaires was divided into the total number of active practitioners in the state. Then the questionnaire totals were multiplied by the quotient, giving the results in the accompanying chart. Only six branches of medicine are given in the chart. The returns from the remaining branches were small and were in-

AVERAGE INCOMES, COLLECTIONS, AND CHARITY WORK OF THE MEDICAL PROFESSION IN WEST VIRGINIA

	Average Income (Gross)	Average Income (Net)	Total Income (Gross)	Total Income (Net)	Percentage of Collections	Total Charity Work
General Practice	$ 8,005.86	$5,235.26	$8,334.105	$5,449,908	77	$ 958,941
Surgery	14,783.33	9,864.50	1,463,550	976,587	75	208,290
Eye, Ear Nose and Throat	12,454.34	7,664.61	971,439	597,840	92	172,470
Internal Medicine	10,388.00	7,811.60	492,600	351,522	75	31,164
Pediatrics	14,300.00	5,812.50	231,000	139,500	76	42,900
Urology	7,522.00	6,428.57	187,500	135,000	76	22,566
Miscellaneous	8,391.58	6,287.82	904,688	654,556	87	117,033
Grand Totals	$ 9,580.60	$6,414.43	$10,455,162	$8,314,923	79	$1,548,864

That the average net income of the urban practitioner is $6,528.64 compared to $4,396 for the rural practitioner.

That the average West Virginia doctor collects but 79 per cent of his accounts annually.

The following analysis of the survey, published in the November issue of the *West Virginia Medical Journal*, undoubtedly will be of interest to Ohio physicians because of the situations covered:

"The active practitioners of medicine in West Virginia, numbering approximately 1,500, collect a total of $10,455,162 annually from the residents of this state, according to statistics just compiled from the questionnaires recently mailed out to the members of the West Virginia State Medical Association. This amount is the actual collections made by the medical profession. If the cost for the services of the medical profession is considered as 33 1/3 per cent of the total cost of medical care, then the amount spent annually for medical care in West Virginia is in excess of thirty million dollars, or $18.18 per person.

cluded in the miscellaneous division, although the actual results are given elsewhere in this article.

"According to the returned questionnaires, the largest net income in the state's medical profession is $28,000 a year, and there are two physicians who make that amount. It might be interesting to point out that one is a general practitioner, the other a surgeon. The smallest net income is $420 a year, listed by a general practitioner in a rural district who has been in active practice for twenty-four years. The country doctor, however, does not fare so badly as one might think. The average net income of the rural general practitioner is $4,396 a year, and the average net income of the urban general practioner is $6,528.64 a year. The 'contract' doctor was figured separately, showing the average net contract to be worth $4,166 a year.

"The average West Virginia doctor collects 79 per cent of his accounts annually and loses the remaining 21 per cent. This 21 per cent amounts to a total of $2,779,220 annually that is lost in bad accounts. The total amount of charity work contributed by the medical profession each year is $1,548,864, or an average of $1,032.57 by each West Virginia doctor. The amount of charity work added to the amount of uncollected or bad accounts gives a total volume of $4,328.084 for which the profession does not receive a cent. If one-half of this amount could be turned into profitable channels, it would mean an increase of more than $1,400 in the income of every practicing physician in the state.

"In this survey of medical economics an attempt was made to determine the number of years the average doctor would be in practice before realizing a comfortable income. Although a special study of the questionnaires was made to obtain this information, it was found that the figures were so much at variance that no standard could be established. In many cases the younger doctors who had been in practice for only six or seven years were making as much as or more than doctors who had spent from twenty to thirty years in the practice of their profession. It was quite clear, however, that the newer graduates just out of college were having a hard time making both ends meet. It was estimated that at least three years were required for the young doctor to get a foothold in the community or city in which he set up an independent practice. There were, of course, exceptions to this rule."

Industrial Workers Said to be the Healthiest

Workers in industry are healthier than the general population, and it is the young employee, rather than the elderly, who is prone to disease, according to indications in a study made by the Milbank Memorial Fund.

Dean K. Brundage, of the United States Health Service, in a study for the research division of the Fund, has analyzed a large volume of data showing the extent of disabling sickness among wage-earning adults. His report states:

"The sickness statistics of industry represent to a surprising extent the younger adult ages. In the manufacturing industries of the country as a whole, probably 80 per cent of the men are below age 45. A large proportion of the female industrial workers, apparently from 90 to 95 per cent, is below age 45.

"There is evidence in the age curves of illness that industrial workers are not representative of the general population from a physical standpoint. Rather, they appear to be, in the main, the flower of the general population in physique and constitution. Between 15 and 50, the age curve of illness in a general population group was found to mount more rapidly than in a typical industrial group. In the general population the trend is steadily upward from ages 20-24 on; but among the industrial employees the frequency rates, based on disabilities lasting two working days or longer, rose more slowly from age 25 to 40, and then actually declined to about age 60 after which the upward trend was resumed.

"The failure of illness frequency to increase with age as rapidly among industrially employed persons as among those in the general population suggests that the healthier individuals may tend to remain in industry to a greater extent than the sickly, thus providing a more favorably selected group from a health standpoint in middle age and beyond than is found among those just beginning industrial life."

The study disclosed that during the eight years from 1921 to 1928 inclusive, respiratory diseases caused nearly one-half of all the sickness disabilities, with the digestive disorders second. Contagious and infectious diseases caused only about three per cent of the cases, which may indicate the efficacy of public health efforts in those directions.

Loss of time for more than one week does not increase markedly with age among industrial workers until about age 50, although the number of days lost does increase. Women workers tend to be absent on account of illness 50 to 100 per cent more often than the men, especially for short periods. Married women experienced considerably more disability than single women.

The excessive use of alcoholic stimulants, according to two studies made by the United States Public Health Service, was most pronounced among men doing the heaviest, most disagreeable work. Gold and coal miners, granite cutters and employees of a dusty cement plant showed a high rate of sickness, especially from respiratory diseases, while pneumonia was marked in certain departments of the iron and steel industry. All four of these trades showed a definite excess in number of influenza victims.

Some Angles on Malpractice Suits and Suggestions for Defense Against Them

That the public—at least a considerable portion of the unthinking public—is all too willing to believe the worst of any man even if "the worst" is nothing more than hearsay rumor or unadulterated untruths, is a truism, the results of which are in many instances damaging to a spotless character or reputation, and economic and social ruination.

The physician along with the man engaged in any other profession or business faces this menace at all times and unless he is prepared to present a stalwart defense and an aggressive counter-attack he runs the chance of sustaining serious economic, professional and personal losses.

Obviously the malpractice suit is the most common weapon to be used against members of the medical profession. A malpractice suit, whether it be justified or not, or even a malpractice threat, naturally, does not do the practice of any physician any good. Some of the phases of the general question of malpractice suits and medical defense are so important that they merit the serious study of every member of the medical profession.

As the end of the calendar and fiscal year in medical organization approaches, it is important that the members of the Ohio State Medical Association have in mind the rules and regulations of the Medical Defense Committee of the State Association and that they promptly remit their membership dues for 1931 to the secretary-treasurers of the county medical societies and academies of medicine in order that the per capita dues in the State Association may be transmitted and received at the headquarters of the State Association *before January 1, 1931*, in order to be in continuous good standing, since the eligibility of a physician to the medical defense plan of the State Association depends first of all upon continuous membership in his county medical society and the State Association.

The question of eligibility to the medical defense plan of the Ohio State Medical Association was adequately summarized and analyzed in the last annual report of the Committee on Medical Defense to the House of Delegates of the Eighty-Fourth Annual Meeting of the State Association at Columbus and published in the May, 1930, issue of the *Ohio State Medical Journal*. The following paragraphs are quoted from the report:

"The State Association cannot assume the defense of a member if he is in arrears with his dues at the time of the alleged malpractice, at the time the threat of suit or the action itself is filed, or if the alleged cause of the suit occurred before the defendant became a member of the State Association. The date accepted to govern these requirements is the day, month and year the dues to the State Association were received at the State Association headquarters from the secretary-treasurer of the county medical society. Annual dues in the State Association are due on or before January 1 of each calendar year.

"The Association moreover will not contribute to the defense of any member who:

"Fails to forward a medical defense application blank, properly filled out, to the State Association offices within 10 days after the service of summons.

"Does not take, or have taken and keep on file, or have available, *X*-ray pictures of fracture cases, unless it can be shown that at the time and place it was impossible to secure an *X*-ray plate.

"Has brought on 'cross complaint' by filing a suit to collect a bill within one year of the termination of his services.

"Is believed guilty, after careful investigation, of illegitimate professional actions or service."

In several recent instances, the Medical Defense Committee has found it necessary to deny medical defense to members in good standing at the time suits were filed against them for alleged malpractice because those members had permitted their dues in the State Association to lapse during the time the alleged cause of action against them arose, or during the time medical or surgical services were rendered from which suits developed.

That the medical defense plan of the State Association is of great value to every member of the Association is readily recognized by those who have studied it thoroughly and especially by those who have found it quite effective in defending court actions against them. As a matter of fact the State Association, through the Medical Defense Committee, has been unusually successful in the defense of its members thus far this year.

A considerable increase in the number of threats and suits against physicians for alleged malpractice has been noted during the past few months. This increase in all probability has been brought about by adverse economic conditions throughout the state, resulting in a greater number of patients who are attempting either to avoid the payment of just fees or who are hoping for monetary gain through damage suits against physicians.

This growing tendency to bleed physicians of money through threats to ruin their professional reputations should be an urge to every physician to keep in good standing in medical organization so that he may enjoy the advantages of the medical defense plan of the State Association. It also should awaken in every physician the desire to

understand thoroughly the various provisions of the plan, clearly and accurately outlined in the annual report of the Medical Defense Committee referred to previously.

The part that the *X*-ray plays in defense against suits for alleged malpractice is also an important angle to be kept in mind.

That the *X*-ray film has an important and very essential role in the defense of malpractice suits can not be refuted. A few years ago, if a fracture, for instance, was alleged to have been overlooked, a defense could be made that proper measurements had been made, the limb manipulated and palpated, and that all methods except the use of the *X*-ray and fluoroscope had been used in the treatment of the injury. Today, a defense of that sort would carry little weight. The *X*-ray has become so universally accepted that the courts have been quick to seize upon the necessity of *X*-ray examination in the diagnosis and treatment of bone injury, and by their decisions require *X*-ray films both before and after the reduction of fractures, especially in communities where there is no question of an *X*-ray outfit being available.

So physicians, at least those who conduct their practices in a thoroughly scientific and business-like manner, promptly make use of the *X*-ray machine in a large variety of cases, not only for the benefit of the patient, but also for the physician's protection in the event of possible subsequent litigation.

The question of how long an *X*-ray film should be preserved is, however, a debatable issue and one on which physicians themselves disagree. Some physicians are of the opinion that *X*-ray films should be retained indefinitely; others that a period of from six months to three or four years is long enough, except for films of specially interesting or unusual conditions.

As a matter of fact, the question of preserving films is largely one for each individual physician to decide for himself.

Every physician, naturally, should preserve films of cases which might be the basis of legal proceedings until the period of limitation for filing court action has expired.

Ohio law in reference to this point states that an action for malpractice against a physician must be brought within a period of one year after the cause thereof accrued. Various Ohio court decisions have held that the statute of limitations does not begin to run as to an action against a physician for malpractice until the contract relation between defendant and the patient is terminated.

It is up to each physician to decide for himself the comparative and relative value of *X*-ray films for scientific and research purposes. It is up to the physician to decide whether the report of the roentgenologist or the film itself is the more valuable. It is up to the physician to decide whether he has sufficient space in which to store films safely and how many his storage room will hold.

These are questions of personal opinion and action. On the other hand, the responsibility of the physician in seeing that *X*-ray films are taken in many types of cases appears to be all-inclusive and the only sensible action for the physician to take for the good of the patients and himself.

As the editor of *Radiology* has well pointed out:

"The defendant's ignorance of the true condition is the real enemy in defending malpractice claims."

While it should be obvious, it may be worthy of repetition that every physician should keep adequate and complete records on all cases, as well as use the care, diligence and skill expected of scientifically trained professional men in the care and treatment of all cases.

While there are many important angles to medical defense, with which physicians should be thoroughly familiar, it is highly essential that every physician keep this one thought in mind at all times. Continuous membership in his county medical society and the State Association is the fundamental requisite for a physician's eligibility to the benefits of the medical defense plan offered by the State Association.

A "Primer on Fractures" issued by the Co-operative Committee on Fractures, of the American Medical Association, and containing charts and diagrams, is just off the press. The "Primer" is intended for use by both students and practitioners. It is not for the purpose of standardizing treatment, but to suggest what constitutes acceptable methods of treatment. It contains the material which found such favorable responses on the part of the visiting physicians at the Scientific Exhibit of the American Medical Association.

In addition to the illustrations, there are appropriate legends written by the members of the Co-operative Committee on Fractures: Drs. Allison, Darrach and Speed. Interleaved are pages for notes; these may be made use of by students whose teachers may care to amplify the material presented or by practitioners who may care to supplement with their own comments. The price of this book is $1.00.

The United States Civil Service Commission has announced that government hospitals throughout the country, including those under the Veterans' Bureau, the Public Health Service and the Indian Service, are in need of medical officers and nurses of various grades.

Deaths in Ohio

George M. Austin, M.D., Wilmington; Medical College of Ohio, 1883; aged 74; member of the Ohio State Medical Association and the American Medical Association; died October 25 following several months illness. Dr. Austin had practiced in Clinton County for nearly fifty years. He was a well known geologist, and recently published a book, "The Geological Survey of Clinton County". His widow survives him.

Isaac W. Bard, M.D., Cleveland; Western Reserve University School of Medicine, 1874; aged 77; former member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 5 at St. John's Hospital, Cleveland, after a long illness. Dr. Bard began practice at Poland with his father, the late Dr. I. D. Bard, and later was located at Girard and Mineral Ridge before moving to Cleveland. For many years he was head of St. John's Hospital. Surviving him are his widow and one son, Dr. Harry L. Bard, of Cleveland.

Corey B. Cullison, M.D., Newark; Starling Medical College, Columbus, 1891; aged 64; died November 9 of cerebral hemorrhage. Dr. Cullison had practiced in Newark for thirty years. He is survived by his widow, one daughter and one son.

Albert G. Eyestone, M.D., Gibsonburg; Baltimore Medical College, 1900; aged 60; member of the Ohio State Medical Association and Fellow of the American Medical Association; died suddenly of heart disease, October 10 as he was returning from a professional call. Dr. Eyestone served his internship in the Maryland General Hospital in Baltimore, and in 1903 opened an office at Rollersville, where he practiced for a short time before locating in Gibsonburg. He was a veteran of the World War. His widow and a brother survive him.

Michael H. Houseworth, M.D., Mason; Miami Medical College, Cincinnati, 1878; aged 78; died October 23. He retired from active practice several years ago. Surviving him are his widow and one son.

Orlando B. Longenecker, M.D., Dayton; Louisville Medical College, Louisville, Kentucky, 1884; aged 71; died at Miami Valley Hospital, Dayton, October 28. He is survived by his widow, one son and one daughter.

Hugo F. Maetke, M.D., Dayton; Columbia University College of Physicians and Surgeons, New York, 1892; aged 60; member of the Ohio State Medical Association and the American Medical Association; died November 10 at Miami, Florida. Dr. Maetke had practiced in Dayton for thirty-five years.

William A. Mansfield, M.D., Barberton; Cleveland University of Medicine and Surgery, Cleveland, 1895; aged 71; former member of the Ohio State Medical Association; died November 1, of carbon monoxide poisoning. Dr. Mansfield retired two years ago after thirty years active practice. He was a founder and staff member of Citizens Hospital, and had held the office of health commissioner of Barberton since his appointment in 1905. Surviving him are his widow and one son.

George O. Maskey, M.D., Upper Sandusky; Western Reserve University School of Medicine, 1882; aged 74; former member of the Ohio State Medical Association; died September 31 of cerebral hemorrhage. Dr. Maskey had practiced in Upper Sandusky from 1882 until 1926 when ill health forced him to retire. He had served in various local and county offices, and during the World War was medical examiner on the draft board. Resolutions of respect were adopted at a special meeting of the Wyandot County Medical Society. His widow and one son survive him.

Joseph D. Parr, M.D., Marietta; Pulte Medical College, Cincinnati, 1890; aged 72; died October 30 in a Detroit hospital, where he had been a patient since September. He had practiced in Marietta for many years. Surviving him are his widow and three sons.

William W. Pennell, M.D., Mt. Vernon; University of Wooster, Medical Department, Cleveland, 1897; aged 77; member of the Ohio State Medical Association and Fellow of the American Medical Association; died September 30, at Christ Hospital, Cincinnati, following an extended illness. He had practiced in Mt. Vernon for many years, and was active in civic affairs and medical organization; was a past president of the Ohio State Pediatric Society; member of the American Association for the Advancement of Science, and life member of the Post-Graduate Medical Assembly of North America. He had contributed a number of papers on medical subjects before various medical organizations; and was also the author of several books of fiction. His widow and two daughters survive him.

William A. Pitzele, M.D., Lorain; University of Illinois, College of Medicine, Chicago, 1903; aged 54; member of the Ohio State Medical Association and Fellow of the American Medical Association; died November 1, following a long illness. Dr.

Pitzele had practiced in Lorain for twenty-seven years, and for twelve years was chief of staff of St. Joseph's Hospital, Lorain. He had served as health commissioner of Lorain for several years. He was a member and one of the founders of the Lorain County Medical Society. Surviving him are his widow, two sons, one daughter; three brothers and one sister.

Clarence J. Shafer, M.D., Norwood; University of Cincinnati, School of Medicine, 1921; aged 34; died September 20. Dr. Shafer was physician and surgeon of the Hamilton County Home. He was a veteran of the World War. His widow and one daughter survive him.

Leander Z. Skinner, M.D., Loudonville; Baltimore Medical College, 1894; aged 64; former member of the Ohio State Medical Association; died October 10. Dr. Skinner had practiced in Loudonville for fifteen years. He is survived by his widow, one brother and one sister.

David Walter Spence, M.D., Springfield; Jefferson Medical College of Philadelphia, 1888; aged 65; died September 14. Following post graduate work at Bellevue Hospital Medical College, New York, he practiced for a short time in Williamsport, Pennsylvania, before locating in Springfield. Surviving him are his widow, one son and one daughter.

Addison L. Stump, M.D., Derby; Starling Medical College, Columbus, 1896; aged 69; member of the Ohio State Medical Association and the American Medical Association; died suddenly of heart disease, on October 19. Dr. Stump was a life-long resident of Pickaway County. He was a member of the county board of education for several years; a member of the county board of health for five years, until his selection as health commissioner, in January, 1930. Dr. Stump was a member of the House of Representatives for two terms. Surviving him are his widow, one brother and two sisters.

Morris Tipton, M.D., Gallipolis; Medical College of Ohio, Cincinnati, 1883; aged 70; died November 9. For twelve years he was a physician at the Columbus State Hospital.

Derrick T. Vail, Sr., M.D., Cincinnati; Miami Medical College, Cincinnati, 1890; aged 66; member of the Ohio State Medical Association and Fellow of the American Medical Association; died October 9, at the University of Cincinnati Holmes Hospital, of heart disease. Dr. Vail practiced in Cincinnati from 1890 until his retirement two years ago, when he moved to Michigan. After his retirement, his two sons, Dr. Derrick T. Vail, Jr., and Dr. Harris H. Vail, conducted the hospital which he founded. Dr. Vail was emeritus Professor of Ophthalmology at University of Cincinnati, College of Medicine. He was a Fellow of the American College of Surgeons, and one of its founders; a member of the American Academy of Ophthalmology and Oto-Laryngology; American Ophthalmological Society, and the American Board for Ophthalmic Examination. In addition to his practice, he contributed many special articles in current ophthalmology journals. Surviving Dr. Vail, in addition to his sons, are his widow and two daughters.

Nicholas J. Shields, M.D., San Luis Obispo, California; Baltimore Medical College, 1898; aged 56; Fellow of the American Medical Association; died October 10 of heart disease. Dr. Shields was a native of Mt. Blanchard, and was well known in Hancock County.

Robert W. Stewart, M.D., New York; Medical College of Ohio, Cincinnati, 1882; aged 77; former member of the Ohio State Medical Association; died November 1. Dr. Stewart practiced in Cincinnati before his retirement several years ago. He is survived by his widow and two daughters.



—The monthly staff meeting of the Memorial Hospital, Painesville, was held on Monday, October 13, with Dr. J. V. Winans presiding. A symposium on Tetanus was given by Drs. M. H. Carmody, C. B. Elliott, and C. O. Hudson. The point was stressed that sodium amytol intravenously in tetanic convulsions, was of decided advantage. Applications of Drs. Wells and Mahan of Willoughby, and Dr. York of Painesville, for membership on the hospital staff, were unanimously approved.

The November staff meeting was held at the Hospital on November 10, with the following program: "An Obscure Case of Intestinal Obstruction", by Dr. E. L. Haffner; Choledocholithiasis with Complications resulting in Fatal Termination", by Dr. Wm. P. Ellis; Tuberculosis in an Infant", by Dr. L. J. Dutch; "Infection of the Face", by Dr. J. V. Winans. During a short business session, it was recommended that a twenty-four hour *X*-ray service be provided by the hospital. The program committee, composed of Drs. B. S. Park, V. N. Marsh, and G. F. Barnett, has given an instructive series of programs during the past year.

—"Laboratory Aids to Diagnosis" was the subject discussed by Dr. W. H. Roehll at a recent conference of the staff of the Middletown Hospital.

—Proposed additions, enlargements and improvements at Veterans Hospital, No. 97, Chillicothe, include: New hospital building, $25,000; two buildings for employees' quarters, $150,000; occupational therapy building and equipment, $65,000; enlargement of kitchens and mess hall,

$40,000; porches on all buildings housing patients, $50,000; finishing basement in building for training classes, $18,000; repair on roads, walks, curbing, etc., $45,000; landscaping, drainage, etc., $50,000; additions to greenhouses, $10,000; garages for employes' automobiles $20,000.

—At a recent meeting of the staff of the Lake County Memorial Hospital, a symposium on "Tetanus" was presented by Dr. M. H. Carmody, Dr. C. B. Elliott and Dr. C. O. Hudson. Application for membership on the staff submitted by Dr. H. S. Wells, Dr. Alfred C. Mahan and Dr. John York were accepted.

—White Cross Hospital General Staff held its semi-annual Clinic Day on Friday, November 14. The guest speaker was Dr. Isaac A. Abt, Professor, Diseases of Children, Northwestern University Medical School, Chicago. Members attending the Clinic were guests of the hospital at a noon luncheon. The detailed program was as follows:

MORNING PROGRAM

"Rabies", Motion Picture; "Congenital Dislocation of the Hip", Dr. Frank Warner; "Kidney Tumors in Children", Dr. Ernest Scott and Miss Oliver; "Acute Infective Osteomyelitis in Children", Dr. Carl D. Hoy; "Peri-nasal Sinus and Mastoids in Children", Dr. Russell Means; "Lymphoid Disease in Infants and Young Children", Dr. H. M. Sage; Discussion, Dr. Arthur M. Hauer; "Anterior Poliomyelitis in Children", Dr. E. G. Horton; Lecture—"Congenital Syphilis in Childhood, Special Guest Speaker, Dr. Isaac A. Abt, Professor, Diseases of Children, Northwestern University Medical School.

AFTERNOON PROGRAM

"Extopic Heart", Motion Picture; "Rectal Diseases in Childhood", Dr. Ed. Hamilton; "Gonorrhea Vaginitis in Children", Dr. Wm. P. Smith; "Pyelitis in Children", Dr. A. B. Landrum; "Viosterol", Dr. Wayne Brehm and Dr. John H. Mitchell; "Pyloric Stenosis in Children", Dr. Orville L. Baldwin; "Hyperthyroidism in Children, Dr. R. A. Ramsey; "Breast Feeding", Dr. S. D. Edelman; "Tracheobronchial Adenitis with Relation to Tuberculosis in Children", Dr. Louis Mark; "Acute Appendicitis in Children", Dr. Andre Crotti; Lecture—"Pneumonia in Childhood", Special Guest Speaker, Dr. Isaac A. Abt, Professor, Diseases of Children, Northwestern University Medical School.

—The Twenty-fourth Hanna Lecture of Western Reserve University, Cleveland, Ohio, was delivered at the Institute of Pathology, October 31, 1930, by Professor M. Weinberg of the Pasteur Institute, Paris. His lecture was on "The Role Played by the Anaerobes in the Etiology, Pathogenesis and Evolution of Infectious Diseases".

NEWS NOTES of OHIO

Springfield—Dr. D. C. Houser, Urbana, president-elect of the Ohio State Medical Association, addressed the members of the senior class of Wittenberg College recently on the subject, "State Medicine".

Cleveland—Dr. George Crile was re-elected a regent of the American College of Surgeons at the recent meeting of the College in Philadelphia.

Cleveland—Dr. Lorne Yule, former assistant superintendent of the Cleveland State Hospital, has been appointed by State Welfare Director H. H. Griswold as superintendent of the new Institution for Feeble Minded at Apple Creek.

Norwood—Dr. William S. Wire, graduate of the College of Medicine, University of Cincinnati, has opened office for general practice here.

Hamilton—Dr. Vera Iber, formerly of this city, has been appointed head of the department of women's diseases at the Mayo Clinic, Rochester, Minnesota.

Cleveland—Dr. Claude S. Beck, assistant professor of surgery in the School of Medicine, Western Reserve University, has been serving as an exchange professor in surgery at Emory University, Atlanta, Ga.

Columbus—Dr. Morgan C. Davies, who is attending the annual post-graduate course at the University of Vienna, will return to Columbus about January 1 when he will resume practice of ophthalmology in association with Dr. E. D. Helfrich.

Akron—Dr. Andrew S. Robinson spoke on "Diets and Digestion" before the Mercator Club recently.

Massillon—Dr. R. R. Reynolds has been elected president of the local Exchange Club.

Marion—Accomplishments of the medical profession during the past 40 years were discussed before the local Rotary Club recently by Dr. J. A. Dodd.

Tiffin—Announcement has been made of the marriage of Miss Esther E. Shorthouse, Cleveland, to Dr. John H. Hess, Cleveland, formerly of Tiffin.

Kinsman—Dr. Robert Thomas and his family have moved from Cleveland here where Dr. Thomas has opened offices.

Worthington—Word has been received here that Dr. Warren G. Harding II, formerly of Worthington and the son of Dr. George T. Harding, Jr., of Worthington, and his wife, Frances Keller Harding, have passed the medical examinations given by the Scottish Conjoint Board of Edinburgh, Scotland. Dr. Harding and his wife are now continuing their studies at Berlin.

Hamilton—At a recent meeting of the Union District Medical Society, composed of physicians from southeastern Indiana, southwestern Ohio and northern Kentucky, the following officers were elected: Dr. P. E. Decatur, Hamilton, president; Dr. E. M. Glaser, Brookville, vice president, and Dr. W. L. Porter, College Corner, secretary-treasurer.

Cincinnati—Speakers for the eighth annual series of meetings on "Social Aspects of Preventive Medicine" for students of the College of Medicine, University of Cincinnati, include: Dr. William S. Keller, Dr. H. B. Weiss, Dr. Julian E. Benjamin, Dr. Arthur C. Bachmeyer, Dr. Emerson A. North, Dr. M. F. McCarthy, Bleecker

Marquette, Kurt Peiser, Calvin S. Glover, and Miss Anna M. Drake.

Cincinnati—Announcement has been made of the marriage of Miss Ethel Bluett and Dr. Clarence W. Betzner, both of Cincinnati.

Conneaut—Dr. J. F. Docherty suffered a broken rib, injured knee and sprained wrists in an automobile accident near Tryone, Pa., while en route to New York City to take post-graduate work at the New York Hospital and Clinic.

Columbus—Dr. Dickson L. Moore, veteran pediatrician, has announced his retirement from active practice.

Toledo—Dr. Carl W. Sawyer, of Marion, recently addressed the Toledo Kiwanis Club.

Cleveland—Board of Trustees of Western Reserve University have confirmed the election of Dr. Carl H. Lenhart, director of the surgical division of St. Luke's Hospital, as professor of clinical surgery in the School of Medicine and chief of the division of surgery of the City Hospital. Dr. Lenhart fills the vacancy left by the death of Dr. Carl A. Hamann.

Cleveland—Dr. N. W. Kaiser, Toledo, was elected president of the Association of Assistant Physicians of State Hospitals, at a recent meeting of the organization here. Dr. Lydia Pogue, Dayton, was named vice president and Dr. B. A. Williams, Cincinnati, secretary-treasurer.

Clyde—Marriage of Miss Marie C. Bintz, Marion, and Dr. Eugene J. Shanahan, of this city, has been announced.

Alliance—Dr. S. S. Sidenburg, for several months acting superintendent of the Molly Stark sanatorium, has accepted a position on the staff of the Loomis sanatorium, Loomis, N. Y.

Cleveland—Dr. Rachael Yarrows, Northwestern University, addressed the Cleveland Women's Medical Society on "Medical Conditions in Russia".

Cleveland—Dr. G. Bourne Farnsworth, for twenty years on the faculty of the School of Medicine, Western Reserve University, has resigned as assistant professor of obstetrics. He will retire from active practice to devote his time to travel.

Cleveland—Marriage of Miss Marian Smith to Dr. Clarence J. Buckley has been announced.

Cleveland—Dr. Donald C. Bell has returned to America after a tour of European neurology centers. He will spend several months studying in Boston before returning to Cleveland.

Cincinnati—Dr. Violette G. Shelton has resumed active practice following a convalescence of nine months from injuries received in an automobile accident at Tucson, Arizona, while en route to Los Angeles.

Cleveland—Dr. A. T. Childers, former psychiatrist for the Cuyahoga County Juvenile Court, has moved to Detroit where he has assumed his new duties as chief of the psychiatry staff of the Children's Fund of Michigan.

Cleveland—Dr. Fred Adelstein has gone to Vienna for a year of post-graduate work in eye, ear, nose and throat.

Mansfield—Dr. George C. Smith has moved to Cleveland where he will be associated with the Cleveland office of the U. S. Veterans' Bureau.

PUBLIC HEALTH NOTES

—The United States Department of Commerce has announced that records of its Division of Vital Statistics for the year 1929 reveal that the mortality from puerperal causes in the birth registration area was 7.0 per 1,000 live births, five-tenths higher than the rate in 1927, the last year for which a summary was made. The rate for puerperal septicemia was 2.6 compared to 2.5 in 1927 and the rate for "other puerperal causes" was 0.3 in 1929.

—The Cleveland Department of Health has broadcast a warning to the public to beware of medical quacks and vendors of fake medicines, who always flourish during times of economic depression.

—The United States Public Health Service has started a study of occupational diseases in an effort to determine some of the newer hazards of industry. The first step in the survey will be a study of the number of workers in each particular occupation of industry so that the number of employes can be checked against the disease reports.

—Representatives of the Rosenwald Fund, Chicago, have been in Cincinnati making a survey for a proposed demonstration for tuberculosis work among negroes.

—Dr. John W. Clark, Oak Hill, has been appointed health commissioner of Jackson County for a period of three months by the newly-created county health board, of which Dr. Oscar McLaughlin, Bloomfield, is one of the members. Organization of health work on a county wide basis in Jackson County was recently effected.

—The results of the studies made by the U. S. Public Health Service with special reference to the hearing of school children and its relation to their work in school have recently been announced. In the whole group studied there appeared to be more normal or above normal hearing among the older children. It is impossible to say whether this is a real difference or whether



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the older children made better records because of a better understanding of the tests. Among the actually hard of hearing (loss of nine or more units) the older children were in the majority, and, in general, there was slightly more significant impairment of hearing among the boys of all ages than among the girls. In no group at any age, when both sexes were taken together, did the rate of children with significant hearing loss rise as high as 4 per cent, and the percentage of children with significant hearing loss was generally greater in the average-for-grade group, and in the group with the lowest intelligence quotient. In general, there was a higher proportion of left ears with good hearing than of right ears. This was true of the group as a whole and of each separate school group. With one exception (boys in the 12-13 year group) the superiority of the left ear was maintained at all ages. Likewise, the predominance of poor hearing in the right ear was general at all ages except 12-13. No explanation of this difference is offered, but the element of chance may have been a factor. Among the children doing the poorest school work in the youngest and oldest groups there was the largest amount of significant hearing loss. In the intermediate-age groups the findings were not clear cut. The percentage of children with a discharge from one or both ears varied inversely with the grade of hearing.

According to announcement by the Ohio Christmas Seal Committee of the Ohio Public Health Association, seventy-five million Christmas Seal stickers have been distributed throughout the state by the Ohio Public Health Association in preparation for the twenty-fourth annual seal sale conducted between November 28 and December 24. The Christmas Seal sale is being conducted by the Ohio Public Health Association, in conjunction with a number of local seal sale committees and public health leagues.

The Ohio Public Health Association committee expects at this year's seal sale to raise $400,000 for "tuberculosis prevention" and other public health work in 1931 and to maintain through that fund the activities of the Ohio Public Health Association and various local health activities. A proportion of the funds raised locally are maintained and expended locally. A proportion is transmitted to the Ohio Public Health Association and to the National Tuberculosis Association.

In an announcement of the campaign, the Ohio Public Health Association states that: "Though the tuberculosis death rate has been halved during the victorious advance of preventive measures during the past few decades, it is still the greatest single cause of death among young Americans between the ages of fifteen and twenty-five."

News Notes From County Societies and Academies

First District

ACADEMY OF MEDICINE OF CINCINNATI

(D. T. Vail, Jr., M.D., Secretary)

October 20—Program: "Non-Specific Protein Therapy of Duodenal Ulcer", by Drs. Leon Schiff and R. J. Norris; "Bronchial Lavage" (with motion pictures) by Dr. H. L. Stitt.

October 27—Program: Basic Science Research Laboratory, University of Cincinnati: "Introduction", by Professor George Sperti; "Physics of Radiant Energy", by John R. Loofbourow; "Effect of Radiations on Micro-organisms", by John A. Fordon; "Radiations on Vitamin D", by Prof. George Sperti; "Synergistic Actions of *X*-rays on Salts", by Dr. Robert Norris; "Tissue Culture", by Dr. Francis Weyroth. (Each paper illustrated with motion pictures).

November 3—Program: "Appendicitis", by Dr. Dudley W. Palmer; "Burns and their Treatment", by Dr. Jerry Lavender.

November 10—Program: "Industrial Toxicology; Its Patron Saint and Some Newer Aspects of Occupational Diseases", by Dr. Carey P. McCord; "Common Cardiac Disorders", by Dr. Clifford Straehley.

November 17—First annual report of the Committee on Maternal Health, covering contraceptive service; sterilization without unsexing, in its eugenic and therapeutic aspects; diagnosis and treatment for sterile husbands and wives; and preparation and examination for fitness for marriage and parenthood.

November 24—Program: "The Role of the Physician in the Health Program of the Future", by Dr. C. E. A. Winslow, Yale University.

Adams County Medical Society held its regular meeting at Manchester on Wednesday, October 15, with a good attendance, including a number of physicians from adjoining counties. The following program was presented: "Renal Tuberculosis, Diagnosis and Treatment", by Dr. C. J. McDevitt, of Cincinnati; "Anterior Poliomyelitis", by Dr. Hazel L. Sproull, West Union; "Extraction of Foreign Bodies from the Cornea", by Dr. G. E. Neal, Manchester. The question of continuing the work of the county health nurse was discussed, and the Society voted by a large majority to recommend to the county budget committee, an appropriation for her continuance. The Manchester members entertained the Society at Hotel Hester.—O. T. Sproull, Secretary.

Clermont County Medical Society met at Bethel, Wednesday, November 19 in Grant Memorial Building. Following a dinner at 12 o'clock, the business session was held. Mr. Forrest E. Ely,

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Prosecuting Attorney of Clermont County, addressed the Society on "Rights and Duties of Physicians with Reference to Indigent Patients", and Dr. John A. Caldwell, Councilor of the First District, spoke on organization matters, and presented a paper on "Carcinoma of the Breast and Metastasis".—Bulletin.

Fayette County Medical Society held its regular November meeting at the Y. M. C. A., Washington C. H., Thursday, November 6. The new Constitution and By-Laws were presented by the committee, and adopted as read with two minor corrections. Dr. W. D. Inglis, Columbus, gave a very interesting and instructive talk on "Eclampsia" which was ably discussed, and appreciated by those present.—James F. Wilson, Secretary.

Highland County Medical Society held a dinner meeting on Wednesday evening, October 8 at Hillsboro Hospital, with Drs. J. B. Glenn and Robert J. Jones as hosts. Following the dinner, members were entertained by very interesting and instructive talks on "Fractures and Their Treatment", by Drs. Robert and Ralph Carothers, of Cincinnati. Both discussions were illustrated with motion pictures.—News Clipping.

Second District

Clark County Medical Society met at Hotel Shawnee, Springfield, on Wednesday, October 8, for the first meeting following a summer vacation. Twenty-two physicians were present for the luncheon. Dr. E. C. Fishbein, of Dayton, addressed the Society on "Parkinsonism", with discussion by Dr. A. Richard Kent. In the absence from the city of Dr. A. H. McKnight, president, Dr. William B. Quinn, vice president, presided.

The luncheon meeting held at Hotel Shawnee, on Wednesday, October 22, was addressed by Major Eugene C. Reinartz of the Medical Corps of Wilbur Wright Field, Dayton. His subject was "The Various Aspects of Aviation Medicine". Dr. Reinartz devoted a part of his talk to some of his aviation experiences, including his non-stop flight from California to the Hawaiian Islands.—News Clipping.

Green County Medical Society held its October meeting in Xenia on Thursday, October 2. Dr. T. F. Myler, Xenia, gave a report of his committee on infantile paralysis. Miss May Winter, R. N., Columbus, spoke on "Practical Use of Massage".—News Clipping.

Miami County Medical Society met at Stouder Memorial Hospital, Troy, on Friday afternoon, November 7. A report of the Committee on Revision of the Constitution and By-Laws was presented at the business session. Dr. Walter M. Simpson, Dayton, spoke on "The Present Status of Medical Practice in the British Isles", giving some of his personal observations of the English Panel System of medical practice. The meeting

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was followed by a dinner at the hospital.—Bulletin.

Montgomery County Medical Society held its regular meeting on Friday evening, October 17, in the auditorium of the Fidelity Medical Building, Dayton. The speaker of the evening was Dr. C. W. Waggoner, Toledo, President of the Ohio State Medical Association, who discussed "Chronic Duodenal Stasis".

The Society met on Friday evening, November 7, at the Fidelity Medical Building auditorium. Dr. Wallace E. Prugh and Dr. W. E. Dapp presented the program for the evening, their subject being "Nephrosis". Discussion by Drs. Brown, Kislig and Taggart.—Bulletin.

Preble County Medical Society held a dinner meeting on Wednesday evening, October 29, at the Central Hotel, Eaton. "Some Factors in the Discussion of Acute Coronary Occlusion" was the subject of an address by Dr. Robert M. Moore, associate in medicine at Indiana University School of Medicine, and a member of various hospital staffs in Bloomington, Indiana.—News Clipping.

Shelby County Medical Society held its regular meeting in the Shelby County Memorial Hospital, Sidney, on Friday, October 3, with a good attendance. Dr. H. A. Lindsay, Sidney, gave a very interesting paper on "Puerperal Mortality", which was thoroughly discussed. Other matters were also discussed during the meeting.

The November meeting of the Society was held at the Shelby County Memorial Hospital, Sidney. "Common Diseases of the Eye" was the subject of a very interesting and complete paper, presented by Dr. A. W. Hobby. A thorough discussion followed.—B. S. Stephenson, Secretary.

Third District

Hancock County Medical Society met on Thursday evening, November 6, at the Elks Club, Findlay, for its monthly dinner. Dr. Walter M. Simpson, Dayton, addressed the Society on the subject of "Undulant Fever". A number of guests were present from surrounding County Societies. —News Clipping.

Logan County Medical Society held its regular meeting at Hotel Ingalls, Bellefontaine, on Friday evening, October 24. Dr. H. L. Mikesell, West Liberty, read an excellent paper on "Rabies".—News Clipping.

Fourth District

TOLEDO ACADEMY OF MEDICINE

(A. P. Hancuff, M.D., Secretary)

November 7—Eye, Ear, Nose and Throat Section. Program: "Some Practical Procedures of the late Dr. Harold Gifford of Omaha, Nebraska", with lantern slide demonstration, by Dr. Sanford R. Gifford, Chicago.

November 14—Annual Joint Meeting of Toledo Dental Society and Toledo Academy of Medicine. Program: "Fractures of the Jaw", with lantern

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November 21—General Meeting. Program: "Functional and Neurological Diseases, including Central Nervous Syphilis", by Dr. Temple Fay, University of Pennsylvania, Graduate School of Medicine. Dr. Fay conducted the Eighth Annual Post Graduate Course of The Academy, in "Diseases of the Nervous System", during the week of November 17.

November 28—Surgical Section. Program: "Intravenous Anesthesia", with lantern slide demonstration, by Dr. K. C. McCurdy; "Abdominal Pregnancy" (case report) by Dr. E. W. Doherty; "Gunshot Wound of the Head" (case report) Dr. F. B. Ficklin.—Bulletin.

Four County Medical Society, composed of the component medical societies in Defiance, Fulton, Henry and Williams Counties, met Thursday afternoon, October 16, at the Lutheran Parish Home, Napoleon. The following program was presented: "General Physical Therapy Methods in Various Diseases", by Dr. N. J. Seybold, Toledo; "Newer Methods of Treatment in Rectal Diseases", by Dr. G. E. Gerkin, Toledo; "Some New Methods in Obstetrics", by Dr. A. A. Brindley, Toledo. Henry County members were hosts at a dinner which concluded the session.—Bulletin.

Wood County Medical Society held its first Autumn meeting with a dinner in the Woman's Building, Bowling Green, on Thursday evening, September 25. Dr. W. H. Rheinfrank, of Perrysburg, was the guest speaker.—News Clipping.

Fifth District

ACADEMY OF MEDICINE OF CLEVELAND

(Claude D. Waltz, M.D., Secretary)

November 7—Clinical and Pathological Section, St. Luke's Hospital. Program: Case Presentations—(a) Congenital Hemolytic Icterus; Effect of Splenectomy. (b) Peptic Ulcer with Pyloric Obstruction in Child of Ten Years. (c) Total Infarct of Ovary due to Torsion in Girl of Fourteen Years, by Dr. D. M. Glover. "A Self-Limited Addison's Disease Syndrome with Marked Gastro-Intestinal Symptoms", by Dr. V. C. Rowland; "Two Cases of Puerperal Infection", by Dr. A. J. Skeel; "Sino Auricular Heart Block", by Dr. A. W. Wallace; "Masked Hyperthyroidism", by Dr. A. D. Nichol.

November 14—Experimental Medicine Section, Medical School. Program (arranged by the Department of Pediatrics) "The Acid-Base Equilibrium of Rats in Rickets and Tetany" (by invitation) Dr. Alfred T. Shohl, and Helen Bennett Brown, Ph.D., Catherine S. Rose, B.S., Donalda N. Smith, B.S., and Florence Cozad, B.S. "Observations on the Etiology of 'Primary Low-Calcium Rickets' in Human Infants", by Drs. H. J. Gerstenberger, J. I. Hartman, J. D. Nourse, and G. R. Russell. "Studies in Growth—Regeneration in Anemia", by Drs. Norman C. Wetzel and A. L. Van Dorn. "Desensitization of the Human against Horse Serum Antitoxins", by Drs. J. A. Toomey and Myron H. August.

November 19—Industrial Medicine and Orthopedic Section. Dinner meeting. Program: "Head Injuries", by Dr. E. J. Brown, with discussion opened by Dr. John Dickenson.

November 21—Regular Academy meeting. Program: "The Present Status of the Yellow Fever Problem", by Dr. Oskar Klotz, Professor of Pathology, University of Toronto.—Bulletin.

Ashtabula County Medical Society held a joint meeting with the staff of Ashtabula General Hospital on Wednesday evening, October 15. Medical equipment, and the proposed bond issue for the General Hospital were discussed by members present.—News Clipping.

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Lake County Medical Society held an open meeting at Lake County Memorial Hospital on Tuesday afternoon and evening, October 14. Mr. J. G. Marshall, of the General Electric *X*-ray Corporation, spoke on "Indications for Physical Therapy". Dinner at the Hospital at 6:15, was followed by an evening session.—F. J. Dineen, Secretary.

Lorain County Medical Society held its regular monthly meeting at Elyria Memorial Hospital on Tuesday, November 11, commencing with a dinner at 5:30. Dr. John R. Davis, Toledo, gave an address on "Practical Methods, Not Generally Used, of Treating Fractures". The lecture was augmented with a screen picture, showing the use of local anesthesia.—Bulletin.

Sixth District

Mahoning County Medical Society met on Tuesday evening, October 21, at the Youngstown Club. The following program, by members of the Department of Surgery of the University of Pittsburgh, was presented; "Injection Treatment of Varicose Veins, its Method of Application with Demonstration", by Dr. J. P. Henry; "Parasympathectomy, its Indication and Use", by Dr. Harold G. Kuehner; "Treatment of Acute Osteomyelitis with Special Reference to the use of Maggots", by Dr. Grover C. Weil. Dr. Weil's paper included a lantern slide demonstration. A buffet luncheon was served at the close of the program.—Bulletin.

Portage County Medical Society held its regular meeting at the home of Dr. George J. Waggoner, Ravenna, on Thursday evening, November 6. "Some of the Problems and Practical Handling of Hyperthyroid Cases" was the subject of an address by Dr. Robert Dinsmore, Cleveland Clinic. —Bulletin.

Stark County Medical Society met in the Medical Library room, Canton, on Tuesday evening, November 11. The program included papers on "An Unusual Abdominal Abscess; Report of a Case", by Dr. J. M. Van Dyke, and "Congenital Heart Disease", by Dr. O. D. Wilson; and consideration and adoption of a new Constitution and By-Laws. Following the meeting, luncheon was served by the Woman's Auxiliary, at the Open Door Club.—Bulletin.

Wayne County Medical Society on the evening of November 11 gave a dinner and reception at the Ohio Hotel, Wooster, to the oldest member of the society, Joseph H. Todd, M.D. Dr. Todd will be ninety-four years of age next February and is probably the oldest physician now practicing in Ohio. He was born in 1837 and began practice in Wayne County in 1865, thus having a continuous record of work of more than sixty-five years. His work has been of very high character and has embodied a great deal of research along medical and scientific lines. He probably had the first microscope that was brought by a physician to this section of the state. He has written very creditably of geology based upon the glacial period as it affected this region. He also has the distinction of having been at the Battle of Gettysburg, while yet a medical student, assisting in the surgery of that period. He is a graduate of Bellevue Medical College and also did his hospital work there. At this testimonial for Dr. Todd tribute was paid him by members of the society and guests. A certificate of life membership in the Wayne County Medical Society, The Ohio State Medical Association, and the American Medical Association was presented to him, the society assuming financial responsibility for such membership for the remainder of his life.—John G. Wishard, Correspondent.

Summit County Medical Society held its regular meeting on Tuesday evening, November 4, at Polsky Auditorium, Akron. Dr. Albert Kuntz, Professor of Micro Anatomy, University of St. Louis, spoke on "The Anatomical Basis of Sympathectomy".—Bulletin.

The Union Medical Association of the Sixth Councilor District held its quarterly meeting on Wednesday, October 8, at Moulton Hall, Kent State College. The program opened with a brief business session at 10 A. M., followed by a paper on "The Doctor in His Relation to the Com-

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SPINACH SALAD

(Six Servings)

	Gms.	Prot.	Fat	Carb.	Cal.
1½ tablespoons Knox Sparkling Gelatine	10	9	..	..	..
¼ cup cold water	..	..	..	..	..
1¼ cups boiling water	..	..	..	..	..
2 tablespoons lemon juice	20	..	..	2	..
½ teaspoon salt	..	..	..	..	..
1½ cups cooked spinach chopped	300	6	..	7	.
2 hard cooked eggs	100	13	10.5	..	.
Total		28	10.5	9	242.5
One serving		5	2	1.5	40

Soak gelatine in cold water and dissolve in boiling water. Add lemon juice, salt, strain and chill. When nearly set, stir in chopped spinach, mold and chill until firm. Serve on lettuce hearts or tender chicory leaves and garnish with hard cooked egg, cut lengthwise in sixths and sprinkled with paprika. Serve with mayonnaise.

JELLIED CHICKEN IN CREAM

(Six Servings)

	Gms.	Prot.	Fat	Carb.	Cal.
1 tablespoon Knox Gelatine	7	6	.	.	..
¼ cup cold chicken broth or water	..	..	..	..	..
1¼ cups boiling chicken broth, fat free	..	..	..	..	..
½ teaspoon salt	..	..	..	..	..
Pinch pepper	..	..	..	..	..
1 cup cooked chicken, cubed	125	24	20	..	..
¼ cup cream, whipped	55	1	22	1.5	..
Total		31	44	1.5	526
One serving		5	7	..	88

Soak gelatine in cold liquid for five minutes and dissolve in hot broth. Season with salt and pepper and chill until nearly set. Fold in chicken and whipped cream. Turn into molds and chill until firm. Serve on lettuce or garnished with parsley and strip of pimento.

TOMATO JELLY

(Six Servings)

	Gms.	Prot.	Fat	Carb.	Cal.
1¼ cups hot water	..	..	..	..	..
½ teaspoon salt	..	..	..	..	..
½ teaspoon whole mixed spices	..	..	..	..	..
1½ tablespoons Knox Sparkling Gelatine	10	9	..	..	..
5 tablespoons cold water	..	.	.	..	..
1¼ cups tomatoes strained	250	3	.5	10	.
2 tablespoons vinegar	..	..	..	..	..
Total		12	.5	10	92.5
One serving		2	.	2	15

Bring to boil, hot water, salt and spices. Soak gelatine in cold water for five minutes and dissolve in hot liquid. Strain into tomatoes and add vinegar. Stir well and pour into molds. Chill until set. Serve plain, or on lettuce, with or without salad dressing.

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munity—or, The Doctor as a Citizen", by Dr. J. H. Seiler, of Akron, secretary-treasurer of the Association. "Vertigo" was the subject of a paper presented by Dr. Homer Weaver, of Canton. Luncheon was served in the college dining hall at 1 P. M. The afternoon session included a paper on "Amytal and Spinal Anesthesia", by Dr. H. V. Sharp, of Akron, and an address on "The Importance of an Intensive Program in the Management of Arthritis Patients", by Dr. Willard C. Stoner, Cleveland, director of medicine at St. Luke's Hospital.—News Clipping.

Seventh District

Belmont County Medical Society met at Kilkenny Inn, Bellaire, on Tuesday, October 28, at 4 P. M. Dr. Wm. W. Lerrmann, Pittsburgh, addressed the Society on "Gastrointestinal Influence on Arthritis", with discussion led by Drs. J. C. Howell and P. L. Ring. A chicken and waffle dinner was served following the program.—News Clipping.

Columbiana County Medical Society held its regular meeting on Tuesday afternoon, November 11, at the Y. M. C. A. Building, East Liverpool. Speakers were Dr. E. E. Kirkwood of the Mahoning County Tuberculosis Sanatorium, and Dr. E. B. Pierce of the Molly Stark Sanatorium.—Bulletin.

Coshocton County Medical Society met at the City Hospital, Coshocton, on Thursday evening, October 30. Papers were presented by Dr. J. D. Lower and Dr. D. M. Criswell, of Coshocton.—News Clipping.

Tuscarawas County Medical Society held a meeting at the Twin City Hospital, Dennison, on Thursday evening, October 9, with 25 members and guests from other societies in attendance. Dr. J. Mitchell Dunn, Columbus, spoke on "The Injection Treatment for Varicose Veins". Following the meeting, lunch was served.—News Clipping.

Eighth District

Athens County Medical Society held its regular meeting at the Presbyterian Church, Nelsonville on Monday, November 3. Dr. Charles A. Doan, head of the Medical Research Department of Ohio State University School of Medicine, addressed the society on "The Diagnosis and Early Treatment of Tuberculosis".—News Clipping.

Fairfield County Medical Society met for a luncheon at the Florentine, Lancaster, on Tuesday, October 14, with twenty-six members present. Dr. R. W. Kissane, member of the staff of White Cross Hospital, Columbus, gave an interesting talk on "Diseases of the Heart".—News Clipping.

Muskingum County Academy of Medicine held its regular monthly meeting in the American Legion Rooms, Memorial Building, Zanesville, on Wednesday evening, November 5. Dr. C. H.

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Higgins, Zanesville, read a paper on "Ethics", and Dr. Paul D. Scofield, of Columbus, spoke on "Spinal Anesthesia".—Bulletin.

Ninth District

Scioto County—The regular monthly meeting of Hempstead Academy of Medicine was held at the Nurses Home, Portsmouth, on Monday evening, November 10. Dr. L. B. Johnson, Cincinnati, presented a paper on "Carrell-Dakin Technique in Private Practice", illustrated with lantern slides. Discussion was opened by Drs. J. S. Rardin and H. A. Schirrman.

Ninth District Medical Society met at the Lafayette Hotel, Gallipolis, on Thursday, October 30, for its annual meeting. The program follows: "The Thymus Gland", by Dr. Jackson Herbert, Portsmouth; with discussion opened by Dr. Dow Allard, of Portsmouth. "Biliary Tract Diseases, Their Diagnosis and Treatment", by Dr. Charles E. Holzer, Gallipolis; discussion opened by Dr. H. A. Schirrman, Portsmouth; "Congenital Syphilis", by Dr. C. W. Wendelkin, Portsmouth; discussion opened by Dr. Ralph F. Massie, Ironton. A banquet at 6 P. M. was followed by a short business session, and a paper on "Problems Faced in General Practice", by Dr. W. R. Riddell, of Jackson. Discussion was opened by Dr. J. J. McClung, of Jackson.—News Clipping.

Tenth District

COLUMBUS ACADEMY OF MEDICINE

(James A. Beer, M.D., Secretary)

October 20—The regular meeting of the Academy was held at the Institution for the Feeble-minded. Musical selections by the Institution orchestra preceded the program. A vote of appreciation was tendered for the entertainment.

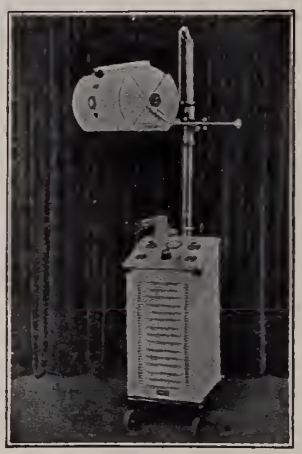
Dr. F. L. Keiser, superintendent of the Institution, discussed "The Problem of Care for the Feeble-minded". A minimum of 5 per cent of the population, or 33,000, must receive institutional care, while there are 2 per cent of the population, or 132,000, in need of some restraint or supervision. Segregation is effective as far as it can be applied. Additional measures are necessary. Selective sterilization is looked upon by leaders in this field as a desirable additional means of control. A proposed bill, to be introduced in the coming session of the Legislature, and which includes features of laws in effect in other states, was read by Dr. Keiser, and discussed by Drs. Pritchard and Probst.

The following physicians were elected to membership in the Academy: Drs. Shirley Armstrong, E. W. Arnold, R. A. Kidd, Jr., E. T. Kirkendall, John H. Mitchell, Charles A. McDonald, L. W. Rohr, W. C. Roller, and C. F. Thompson.

The meeting adjourned to the reception rooms, where refreshments in keeping with the season, were served by Mrs Keiser.

October 27—Regular meeting of the Academy, held at the Public Library. Dr. R. R. Kahle dis-

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cussed a case of "Tumor of the Parotid", operated under conduction anesthesia, in a very satisfactory manner. Dr. A. M. Steinfeld discussed Madelung's Disease, and also Pott's Abscess, using plates made from recent cases. Dr. J. F. Baldwin described five recent and unusual cases of Appendicitis.

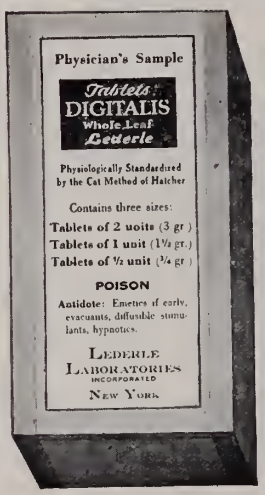
Dr. Paul D. Scofield presented the subject of "Spinal Anesthesia". Respiratory and cardiac centers not affected. Fall in blood pressure due to dilation of splanchnic vessels. Trendelenberg position prevents cerebral anaemia, and is to be preferred to the use of epinephrin. Technique of administration was described and also shown in a series of plates. Dr. I. B. Harris told of his experience with spinal anesthesia in 142 cases. Neocain used at present. He uses ephedrine to maintain blood pressure. He supports this form of anesthesia. Dr. E. M. Freese also favors this form of anesthesia, especially in bad risk cases. Dr. S. J. Goodman also spoke in its favor. Dr. Joseph Price has used it 1000 times with favorable results. Dr. J. F. Baldwin has used it with good results. Dr. Drury has had good results in 800 cases. No deaths.

November 3—Medical Clinic at Nurses Auditorium of St. Francis Hospital. Dr. E. F. McCampbell showed a case of "Aortic Insufficiency". Films and tracings were used to illustrate important features of the subject. Dr. John Dudley Dunham showed a case which has been referred to him as a gastrointestinal subject, but which gave evidences of being a good example of "The Great Imitator". Results of tests, charts and films were used to demonstrate the correctness of his diagnosis. Dr. G. T. Harding, Jr., presented a patient who had adopted a form of hysteria as a protective measure in his losing struggle in society. The importance of careful history taking was emphasized. Dr. L. H. Van Buskirk showed two cases of Pneumothorax. Films were shown to demonstrate the correctness of diagnosis. Dr. Louis Mark discussed the subject.

November 10—Dr. E. J. Emerick presented the subject of "Diagnosis of Brain Tumors", with presentation of cases and patients. Headache, vomiting and vertigo are usual symptoms. Twelve patients having operative treatment were cured or greatly benefited. Epilepsy is often due to tumors. Two patients were presented after successful operations. Dr. Pritchard discussed the ten cases occurring at the State Hospital during the last ten years, nine of whom have died. All had mental symptoms; one-half had lues; five had choked disc. Duration from six months to nine years. One case still living after ten years. Dr. G. T. Harding, III, stated that tumors occur much oftener, especially in epilepsy. Dr. H. E. LeFever showed a series of *X*-ray plates from six cases in which confirmatory evidence was easily seen. Dr. Ivor Clark pointed out difficulty of diagnosis of choked disc. Dr. F. P. Smith, of

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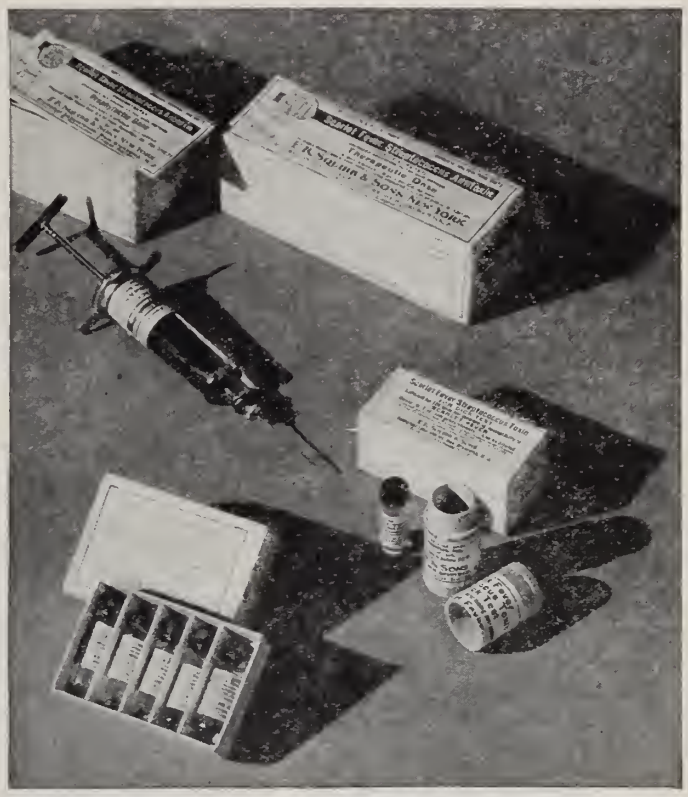
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Marion, discussed symptoms in cases seen in his care.

Dr. Fred Fletcher read a paper on "Surgical Management of Biliary Infections with Evaluation of End Results". The importance of case before and after operation was emphasized. All phases of the subject were covered fully. Dr. I. B. Harris urged care in history taking, and in physical examination. Cholecystography is often very helpful. Dr. C. A. Hyer also emphasized the need for medical care in surgical cases. Dr. Andre Crotti stated that drainage may give better results than removal.

The Columbus Hospital Association, represented by Miss Mary Jamieson, chairman, and Dr. J. G. Benson, secretary, presented a plan for the care and public expense of indigent cases requiring hospitalization. After discussion, on motion by Dr. Goodman, the Academy unanimously endorsed the plan.—James A. Beer, Secretary.

Crawford County Medical Society held its regular meeting on Wednesday afternoon, September 24, at the Galion Country Club, with wives of members as guests. The afternoon was spent at golf and cards. Twenty members and guests enjoyed a six o'clock dinner. The guest speaker was Dr. E. G. Horton, Columbus, who discussed the subject of "Infantile Paralysis".—News Clipping.

Knox County Medical Society met at the Alcove Restaurant, Mt. Vernon, on Thursday, September 25, for its regular luncheon meeting. Dr. J. F. Baldwin, Columbus, spoke on the subject of "Ancient and Modern Surgery Contrasted".—News Clipping.

The following have been granted licenses under reciprocity to practice medicine and surgery in Ohio, the State Medical Board has announced; Daniel G. Caudy, Zanesville, Jefferson Medical College; Samuel J. Ferguson, Cincinnati, Medical College of Virginia; Mabel Emery, Mansfield, Women's Medical College; Addison G. Moore, Columbus, Indiana University; Ursula Goodenough, Cincinnati, Syracuse Medical College; Robert S. Lowry, Kingsville, Medico-Chirurgical College, and Harry J. Miller, Payne, Eclectic Medical College.

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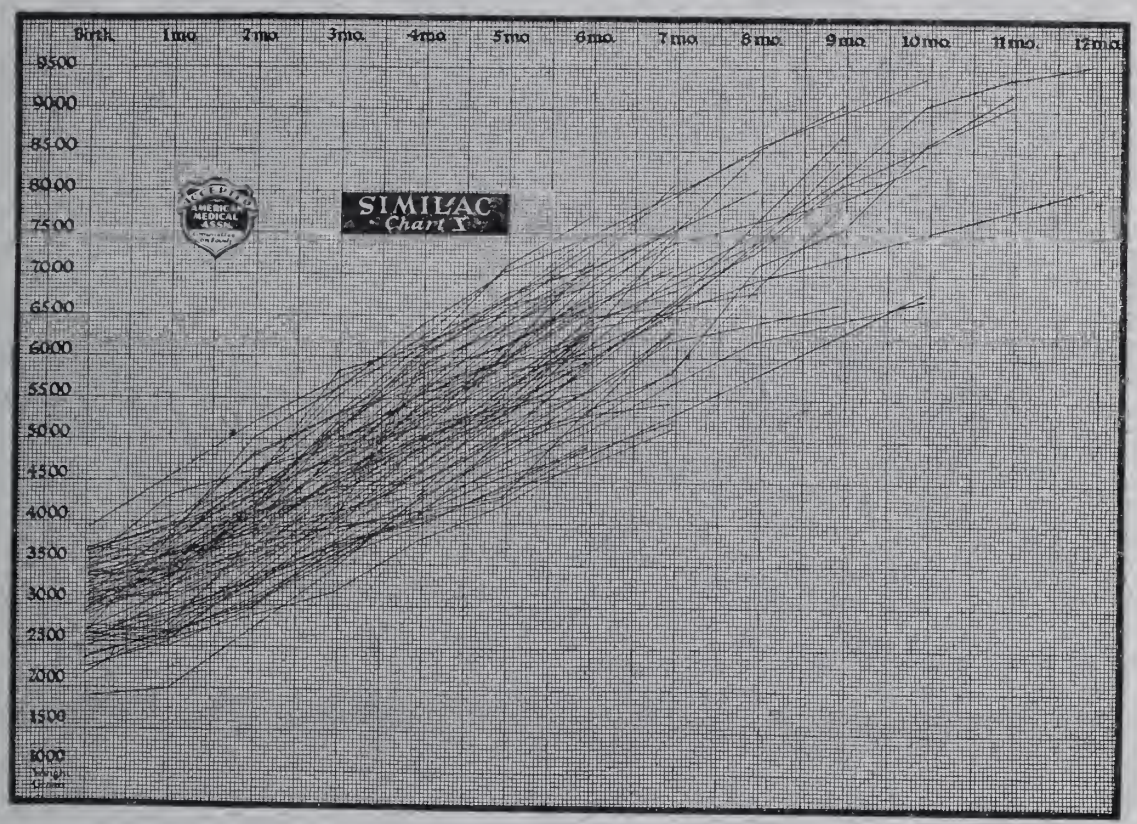
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The infants were started on Similac at birth, the Similac being prepared in the proportion of one ounce of Similac by weight to 7½ ounces of water, and were fed an amount of this mixture daily, each feeding period lasting not longer than twenty minutes. The amount of Similac offered the infants was in accordance with their demand for food, there being no set rule as to the quantity which was given. At no time were they urged to take all food offered.

Accessory Foods

In addition to the feeding of Similac, each infant received four c.c. of cod liver oil and at least one ounce of orange juice or two ounces of tomato juice daily. The amount of orange or tomato juice was gradually increased. Vegetable pulp and cereals were added to their diets, but in all cases Similac constituted the only milk feeding that the infants, whose weights are represented on this chart, received.

No Intestinal Disturbances

One of the most striking features of these cases was the lack of intestinal disturbances. The hospital histories of these seventy-five cases do not record a single instance where the feeding of Similac had to be discontinued because of a gastro-intestinal upset. Neither do they record the administration of any cathartic. The fact that not one of them had to have its diet changed because of an intestinal upset is rather remarkable in view of the possibility of cross infection which always exists in a hospital.

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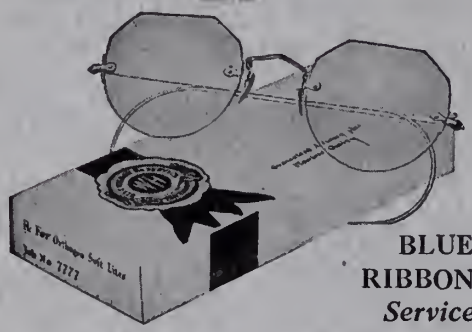
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